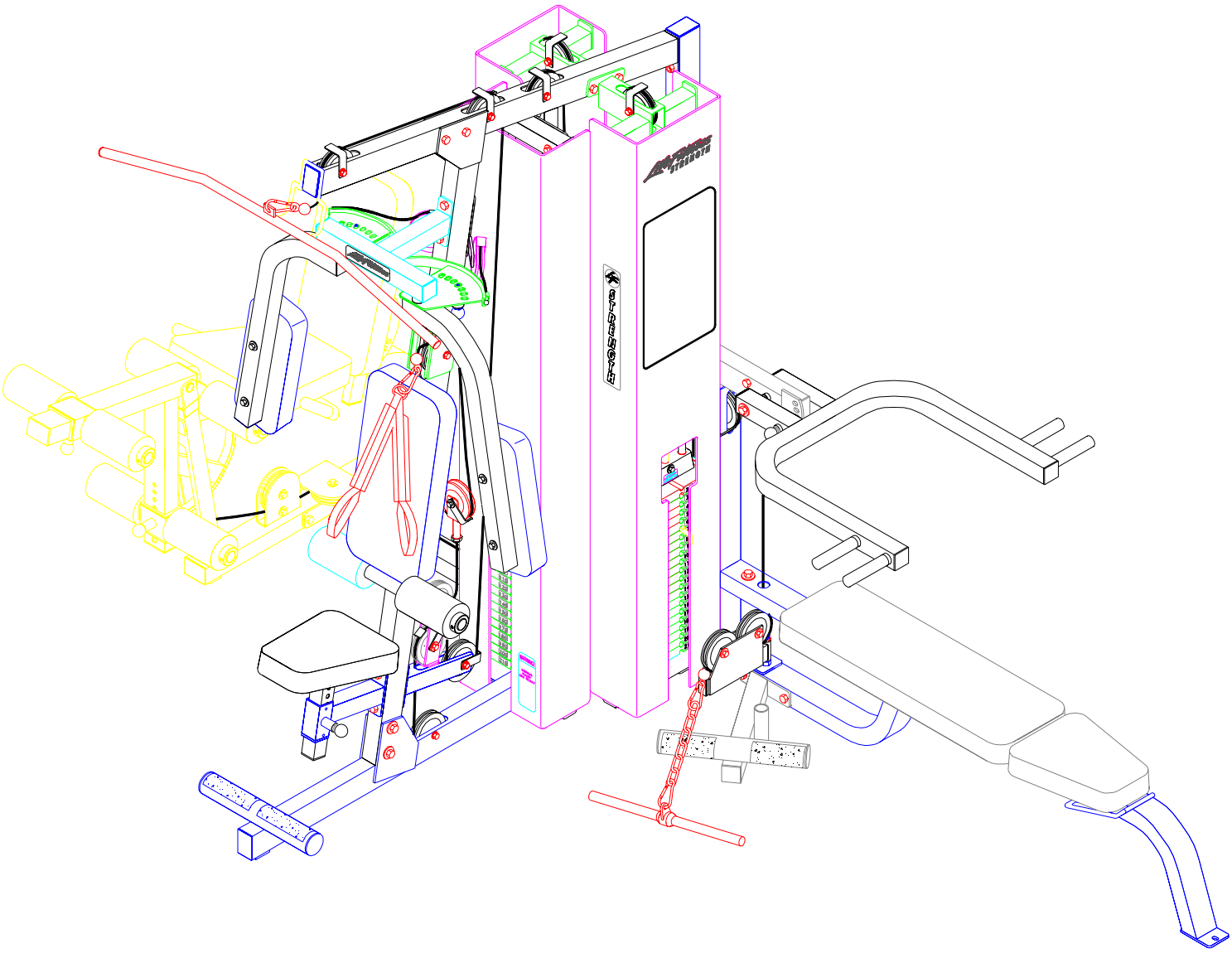
LifeFitness

STRENGTH

8500 3-STACK MULTI-GYM



ASSEMBLY INSTRUCTIONS

IMPORTANT NOTES

Please note:

* Thank you for purchasing the LIFE FITNESS 8500 MULTI-GYM. Please read these instructions thoroughly and keep them for future reference. This product must be assembled on a flat, level surface to assure its proper function.
* We recommend cleaning your product (pads and frame) on a regular basis, using warm soapy water. Touch-up paint can be purchased from your LIFE FITNESS customer service representative at (800) 328-9714.

There is a risk assumed by individuals who use this type of equipment. To minimize risk, please follow these rules:

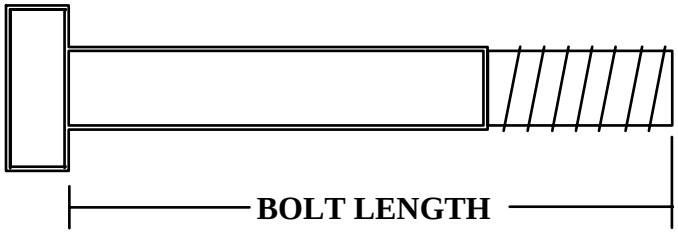
1. Inspect equipment daily. Tighten all loose connections and replace worn parts immediately. Failure to do so may result in serious injury.
2. Do not allow minors or children to play on or around this equipment.
3. Exercise with care to avoid injury.
4. If unsure of proper use of equipment, call your local LIFE FITNESS STRENGTH distributor or call the LIFE FITNESS STRENGTH customer service department at (800) 328-9714.
5. Consult your physician before beginning any exercise program.

Tools Required for Assembly

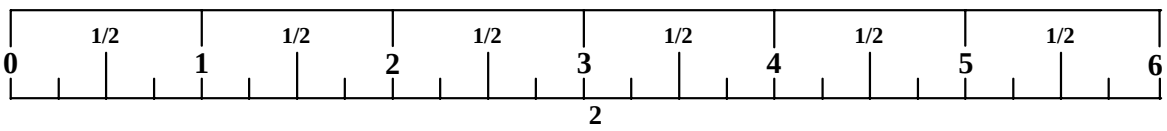
* Rubber mallet or hammer
* 3/4” wrench, 9/16” wrench
* Ratchet with 3/4” and 9/16” sockets
* 5/32”, 3/16”, 7/32” Allen wrenches
* Adjustable wrench
* Tape measure

Bolt Length Ruler

NOTE: BOLT LENGTH IS MEASURED FROM THE UNDERSIDE OF THE HEAD OF THE BOLT.



BOLT LENGTH RULER:



PARTS LIST

KEY	PART #	DESCRIPTION	QTY
1	6617103	REAR UPRIGHT	1
2	6779802	LEG BACK PAD ADJUST	1
3	6625502	LEG BACK PAD SUPPORT	1
4	6624202	BACK PAD ANGLE LEFT	1
5	6624302	BACK PAD ANGLE RIGHT	1
6	6622903	PEC ARM RIGHT	1
7	6623003	PEC ARM LEFT	1
8	6623503	PRESS ARM	1
9	6624502	CALF/LOW ROW	1
10	6622503	BEARING HOUSING	1
11	6620903	FLOATING PULLEY STOP	1
12	6691803	SEAT SUPPORT	1
13	6692402	PAD SUPPORT	1
14	6623702	WOLFF SLEEVE	1
15	6662203	LEG EXT HANDLE RIGHT	1
16	6662303	LEG EXT HANDLE LEFT	1
17	6628302	2 X 8" PLATE	1
18	6275302	LAT BAR	1
19	6523401	72-3/8" GUIDE ROD	6
20	6765203	PRESS G.R. SUPPORT	1
21	6765303	LEG G.R. SUPPORT	1
22	6769903	PEC G.R. SUPPORT	1
23	6768003	LEG WT. STACK BASE	1
24	6767903	PRESS WT. STACK BASE	1
25	6769003	BASE	1
26	6769702	PULLEY BRACKET	1
27	6769803	CENTER PULLEY BRACKET	1
28	6772102	PEC CAM	2
29	6768803	FRONT UPRIGHT	1
30	6768503	TOP BOOM	1
31	6769203	REAR BASE LEG	1
32	6965503	LEG CURL/EXTENSION	1
33	6872502	PAD SLEEVE	2
34	6771003	LEG FRAME	1
35	6770102	SWIVEL PULLEY BRACKET	1
36	6871702	PRESS ARM ADJUST	1
37	6768303	PRESS FRAME	1
38	6770703	PRESS BASE	1
39	6772201	19-1/4" TUBE	1
40	6772301	21-1/2" TUBE	1
41	6764901	4 X 7" ROLLER PAD	8
42	6773101	LAT CABLE ASSEMBLY	1
43	6962401	LEG CABLE ASSEMBLY	1
44	6773301	PRESS CABLE ASSEMBLY	1
45	6954901	AB CRUNCH CABLE ASSEMBLY	1
46	6773501	PEC DEC CABLE ASSEMBLY	1
47	3108002	WEIGHT STACK CUSHION	8
48	3116101	4-1/2" PULLEY	24
49	3202301	PILLOW BLOCK BEARING	2
50	6284501	20 HOLE SELECTOR SHAFT	3
51	6389701	LOW ROW CHROME BAR	1
52	6619301	U-PIN	1
53	6714601	HEAD PLATE	3
54	3116001	1-1/4" SQ. RUBBER BUMPER	3
55	6594702	FLOATING PULLEY BRACKET	1
56	6651602	2 X 15-1/2" PLATE	2
57	6868702	4-1/2 X 8" PLATE	1
58	6122702	3/8 X 1/2" SPACER	2
59	3118401	4" VINYL CAP	1

KEY	PART #	DESCRIPTION	QTY
60	6140701	1 X 1" GLIDE	5
61	6177001	2-1/2 X 5-1/2 NON-SKID STRIP	4
62	6412001	3/8 X 2-3/4" DIA. SPRING PIN	6
63	6466901	1/2 X 3-1/2" DIA. SPRING PIN	1
64	6954703	AB PULLEY PLATE	2
65	6692601	3 X 2" END CAP	2
66	6781601	1/2 X 7-7/8" SPRING PIN	1
67	6757701	2-7/8 X 1" CABLE CLIP	12
68	3103801	5/16" SNAP LINK	4
69	6480301	3/8" FLANGE SPACER	24
70	6020601	1/2" FLANGE BEARING	4
71	3104901	3/4" FLANGE BEARING	6
72	6619501	3/4" SLEEVE BEARING	2
73	3109602	1/2" PAL NUT	1
74	6075906	12 LINK CHAIN	1
75	6214401	WEIGHT STACK PIN	3
76	6406401	HINGE TAB	4
77	6695001	3/4" DIA. TAPPED SHAFT	1
78	3103302	13/16" SHAFT COLLAR	6
79	3103304	1-5/16" SHAFT COLLAR	8
80	3102501	3/8" WASHER	67
81	3114502	3/8" LOCK WASHER	5
82	3102802	3/8" LOCK NUT	41
83	3102807	3/8" LOW HEIGHT LOCK NUT	3
84	3102502	1/2" WASHER	21
85	3102801	1/2" LOCK NUT	24
86	3102804	1/2" LOW HEIGHT LOCK NUT	8
87	3202401	3/8 X 1" BTTN HD CAP SCREW	4
88	3102901	3/8 X 1-1/4" BOLT	15
89	3102933	3/8 X 2" BOLT	14
90	3102922	3/8 X 2-3/4" BOLT	16
91	3102915	3/8 X 3-1/4" BOLT	16
92	3102906	3/8 X 4" BOLT	4
93	3202101	1/2 X 1-1/4" BOLT	2
94	3102910	1/2 X 3" BOLT	7
95	3102918	1/2 X 3-1/4" BOLT	8
96	3102917	1/2 X 4" BOLT	10
97	3202107	1/2 X 6-1/2" BOLT	2
98	3202105	1/2 X 7-1/2" BOLT	1
99	6780101	PEC ARM PAD	2
100	6780001	PRESS SEAT PAD	1
101	6780301	PRESS BACK PAD	1
102	6780201	LEG SEAT PAD	1
103	6780401	LEG BACK PAD	1
104	6780601	PEC SEAT PAD	1
105	6780501	PEC BACK PAD	1
106	6214501	WEIGHT PLATE	60
107	6703801	WEIGHT PLATE LABELS (LBS.)	1
108	6189501	WEIGHT PLATE LABELS (1-25)	1
109	6382301	WEIGHT PLATE BUSHING (10 CT)	12
110	6375801	AB CRUNCH STRAP	1
111	6779703	LEG SHROUD	1
112	6779503	PEC SHROUD	1
113	6779601	PRESS SHROUD	1
114	3102909	3/8 X 1" BOLT	12
115	3108404	3/8 X 3" COUNTERSUNK BOLT	2
116	6827001	2-7/8 X 2-1/4" CABLE CLIP	8
118	6122704	1/4" SPACER	4

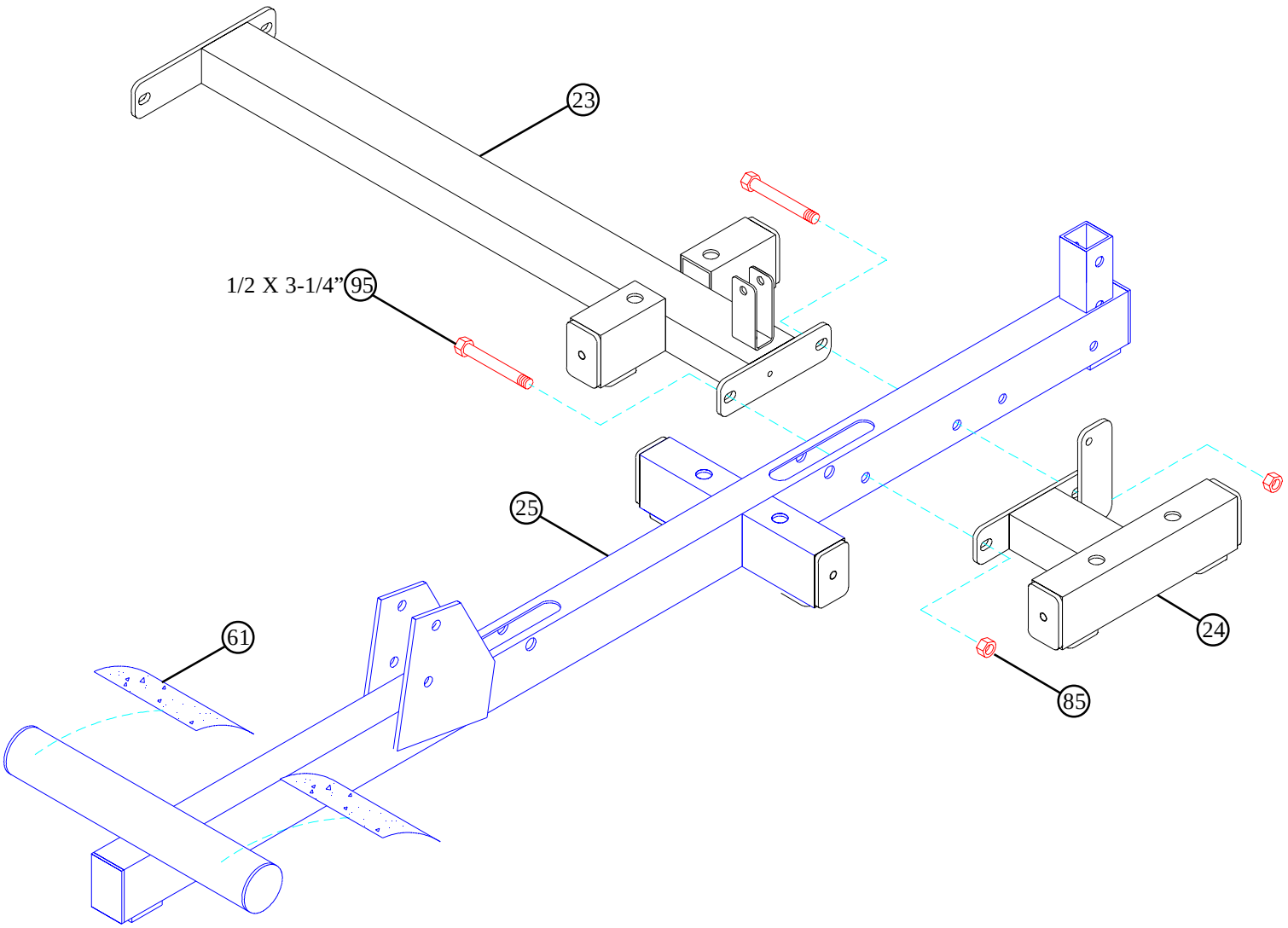
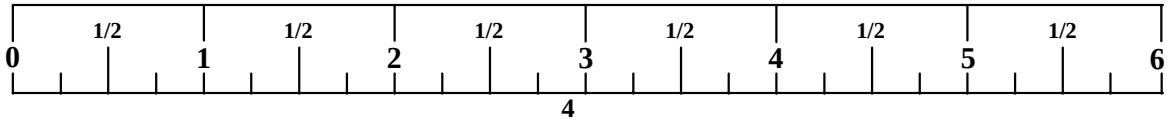


FIGURE 1

STEP 1:

- **LOOSELY** assemble the LEG WEIGHT STACK BASE (23) and the PRESS WEIGHT STACK BASE (24) to the BASE (25) using two 1/2 X 3-1/4” BOLTS (95) and two 1/2” LOCK NUTS (85) as shown in FIGURE 1.

- Apply two NON-SKID STRIPS (61) to the BASE (25) as shown in FIGURE 1.



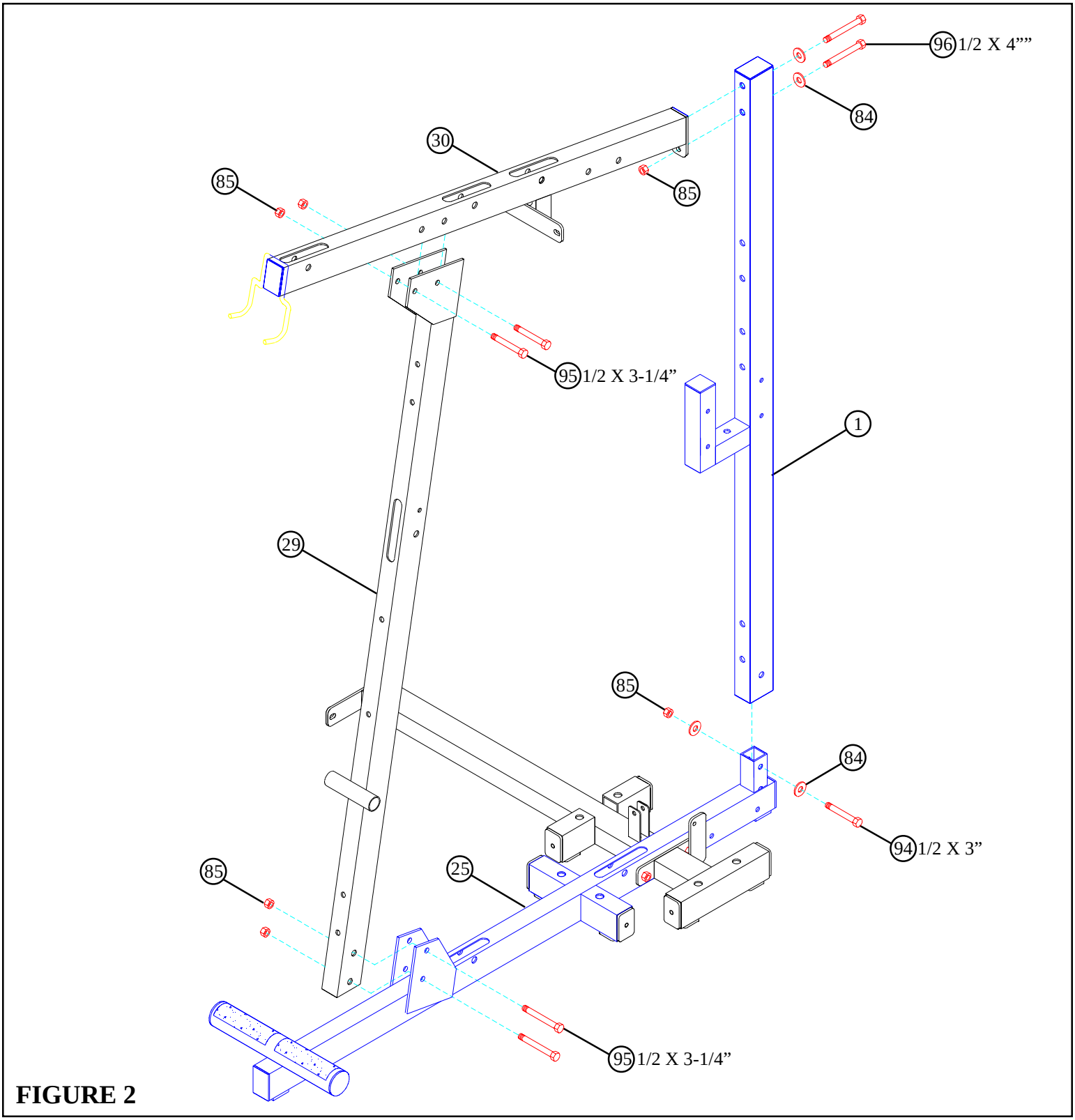


FIGURE 2

STEP 2:

- **LOOSELY** assemble the FRONT UPRIGHT (29) to the BASE (25) using two 1/2 X 3-1/4" BOLTS (95) and two 1/2" LOCK NUTS (85) as shown in FIGURE 2.
- **LOOSELY** assemble the REAR UPRIGHT (1) to the BASE (25) using one 1/2 X 3" BOLT (94), two 1/2" WASHERS (84), and one 1/2" LOCK NUT (85) as shown in FIGURE 2.
- **LOOSELY** assemble the TOP BOOM (30) to the REAR UPRIGHT (1) using two 1/2 X 4" BOLTS (96), two 1/2" WASHERS (84), and one 1/2" LOCK NUT (85) as shown in FIGURE 2.
- **LOOSELY** assemble the TOP BOOM (30) to the FRONT UPRIGHT (29) using two 1/2 X 3-1/4" BOLTS (95) and two 1/2" LOCK NUTS (85) as shown in FIGURE 2.

TIGTEN ALL LOOSE FRAME CONNECTIONS MADE TO THIS POINT!

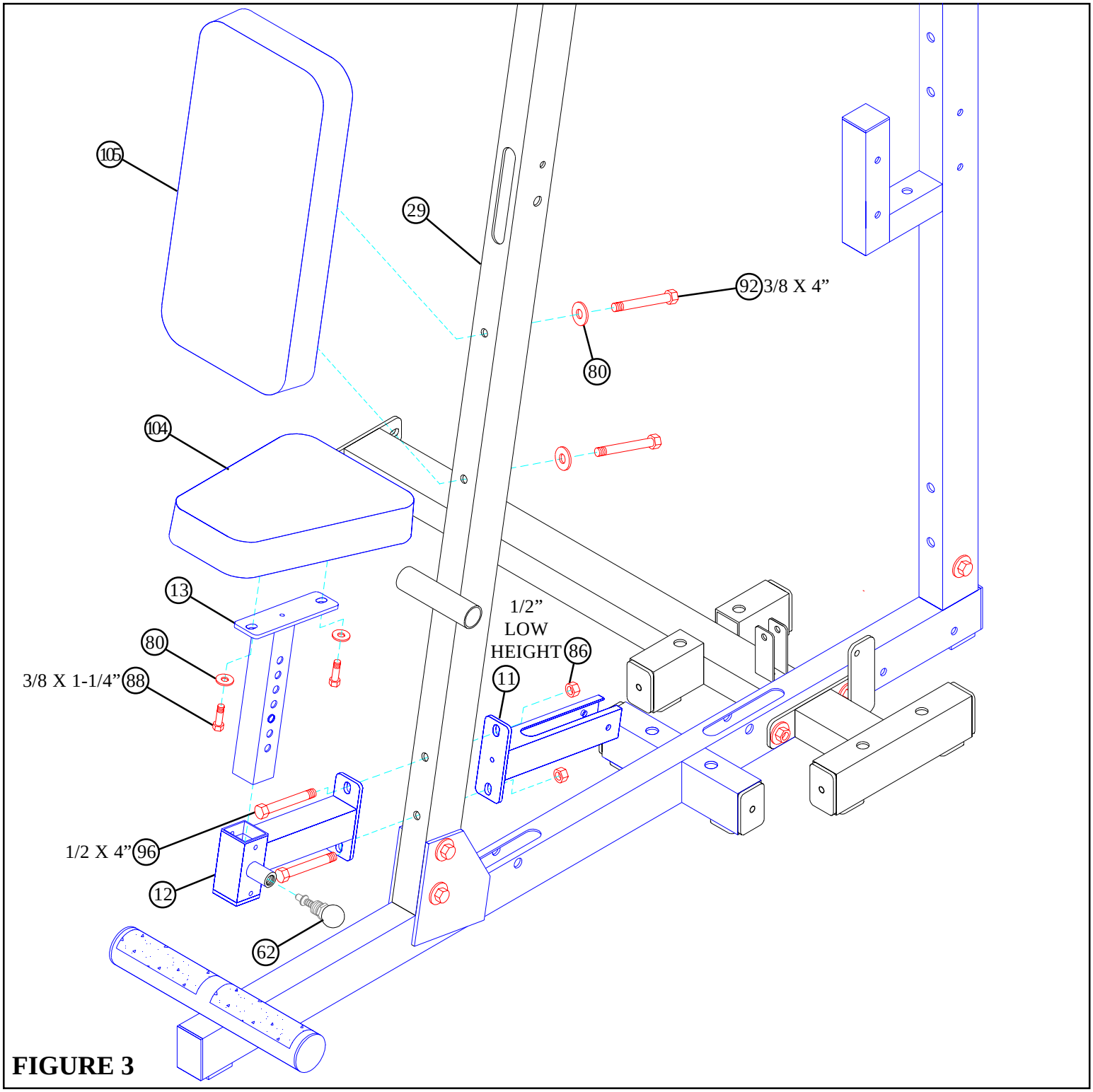
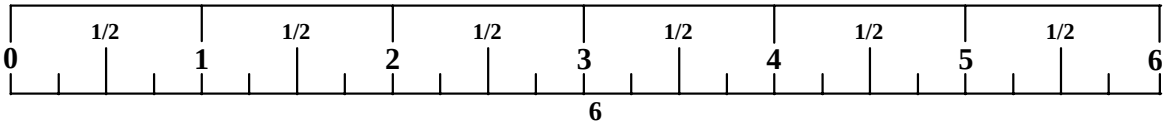


FIGURE 3

STEP 3:

- **SECURELY** assemble the FLOATING PULLEY STOP (11) and the SEAT SUPPORT (12) to the FRONT UPRIGHT (29) using two 1/2 X 4” BOLTS (96) and two 1/2” LOW HEIGHT LOCK NUTS (86) as shown in FIGURE 3.
- **SECURELY** assemble one 3/8 X 2-3/4” SPRING PIN (62) to the SEAT SUPPORT (12) as shown in FIGURE 3.
- **SECURELY** assemble one PEC SEAT PAD (104) to the PAD SUPPORT (13) using two 3/8 X 1-1/4” BOLTS (88) and two 3/8” WASHERS (80) as shown in FIGURE 3.
- **CAREFULLY** insert the PAD SUPPORT (13) into the SEAT SUPPORT (12) and engage the SPRING PIN into one of the holes.
- **SECURELY** assemble one PEC BACK PAD (105) to the FRONT UPRIGHT (29) using two 3/8 X 4” BOLTS (92) and two 3/8” WASHERS (80) as shown.



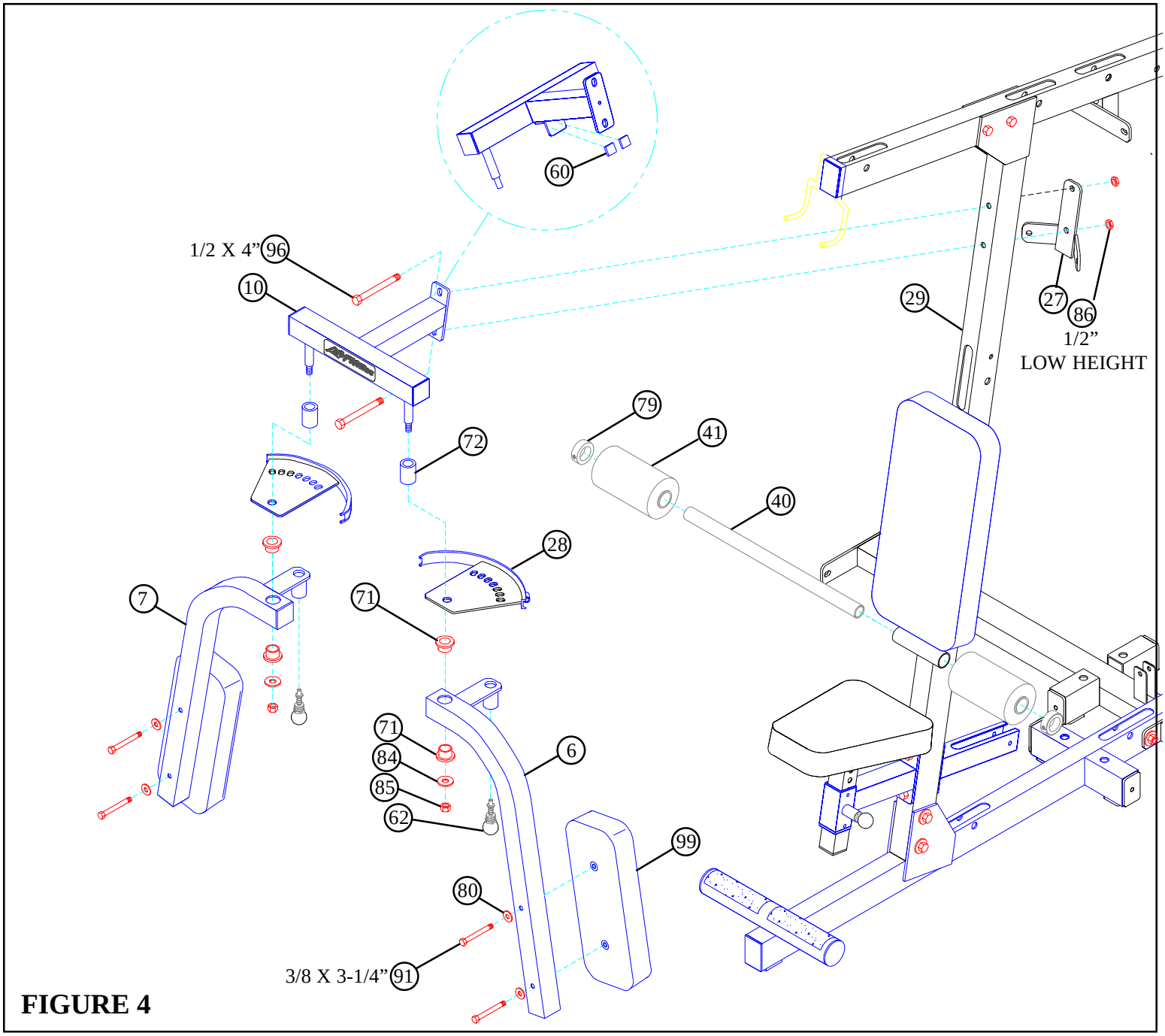


FIGURE 4

STEP 4:

- **SECURELY** assemble the BEARING HOUSING (10) and the CENTER PULLEY BRACKET (27) to the FRONT UPRIGHT (29) using two 1/2 X 4” BOLTS (96) and two 1/2” LOW HEIGHT LOCK NUTS (86).
- Assemble the RIGHT PEC ARM (6) and one PEC CAM (28) to the BEARING HOUSING (10) using one 3/4” SLEEVE BEARING (72), two 3/4” FLANGE BEARINGS (71), one 1/2” WASHER (84), and one 1/2” LOCK NUT (85) as shown in FIGURE 4. **(NOTE: SECURELY tighten, then back nut off 1/4 turn to allow the PEC ARM to rotate freely.)**
- Assemble the LEFT PEC ARM (7) and one PEC CAM (28) to the BEARING HOUSING (10) using one 3/4” SLEEVE BEARING (72), two 3/4” FLANGE BEARINGS (71), one 1/2” WASHER (84), and one 1/2” LOCK NUT (85) as shown in FIGURE 4. **(NOTE: SECURELY tighten, then back nut off 1/4 turn to allow the PEC ARM to rotate freely.)**
- **SECURELY** assemble a 3/8 X 2-3/4” SPRING PIN (62) to the to the RIGHT & LEFT PEC ARM (6 & 7). See FIGURE 4.
- Apply two 1” X 1” GLIDES (60) to the BEARING HOUSING (10) where the PEC CAMS (28) come in contact with the BEARING HOUSING (10) as shown.
- **SECURELY** assemble one PEC ARM PAD (99) to both the RIGHT & LEFT PEC ARMS (6 & 7) using four 3/8 X 3-1/4” BOLTS (91) and four 3/8” WASHERS (80). See FIGURE 4.
- **SECURELY** assemble two 4 X 7” ROLLER PADS (41) to the FRONT UPRIGHT (29) using one 21-1/2” TUBE (40) and two 1-5/16” SHAFT COLLARS (79). **SECURELY** tighten set screws on SHAFT COLLARS (79). See FIGURE 4.

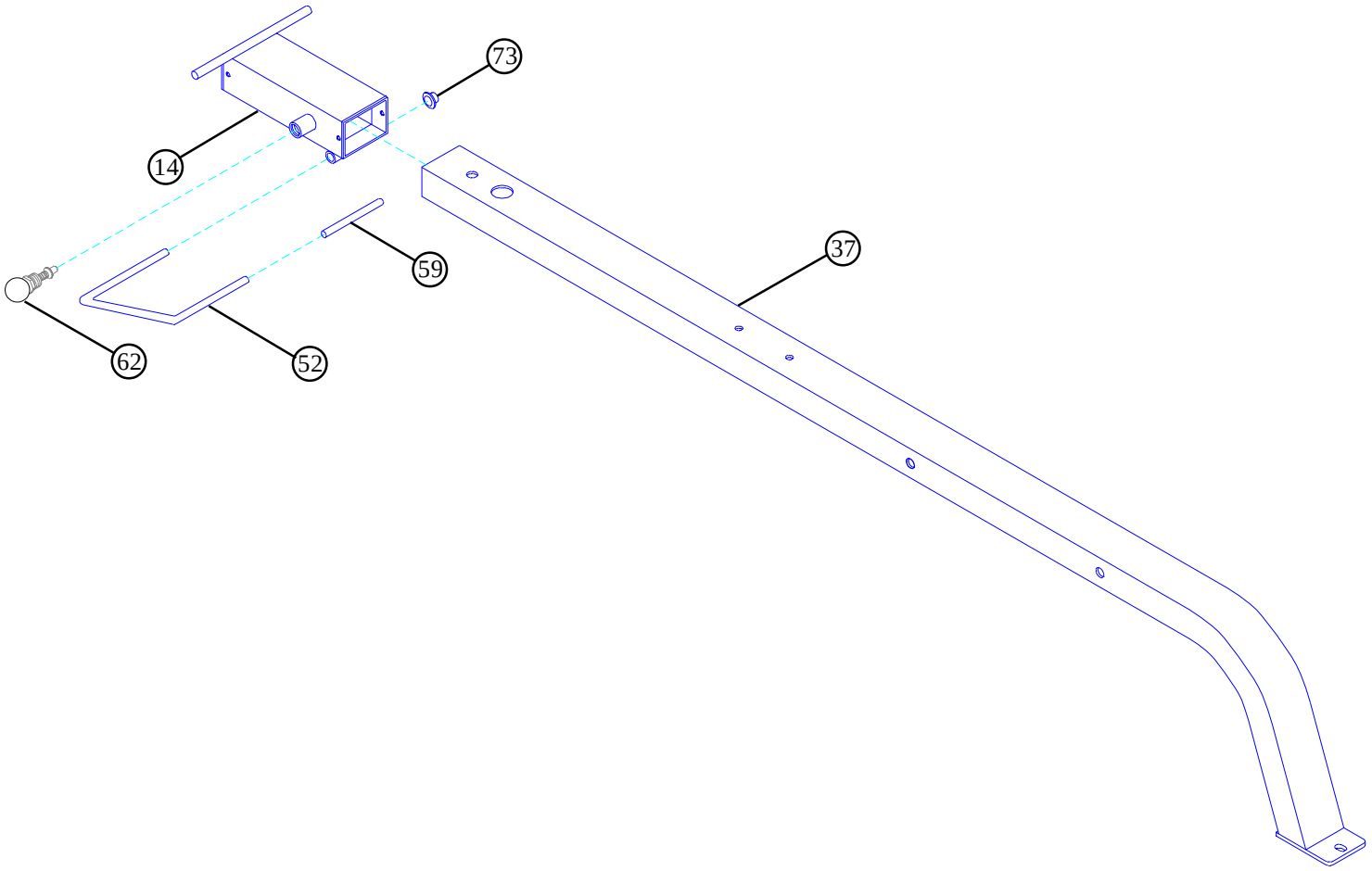
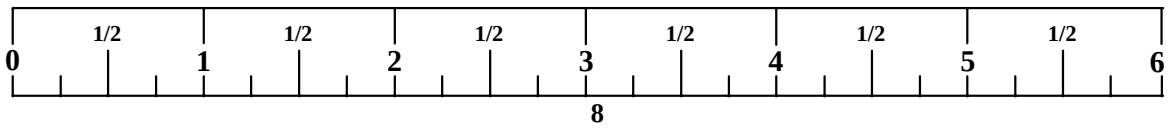


FIGURE 5

STEP 5:

- **SECURELY** assemble one 3/8 X 2-3/4" SPRING PIN (62) to the WOLFF SLEEVE (14) as shown in FIGURE 5.
- Assemble one U-PIN (52) to the WOLFF SLEEVE (14) using one 1/2" PAL NUT (73).
- Slide one 4" VINYL SLEEVE (59) onto the U-PIN (52) as shown in FIGURE 5.
- **CAREFULLY** slide the WOLFF SLEEVE (14) onto the PRESS FRAME (37) until the SPRING PIN engages in one of the holes.



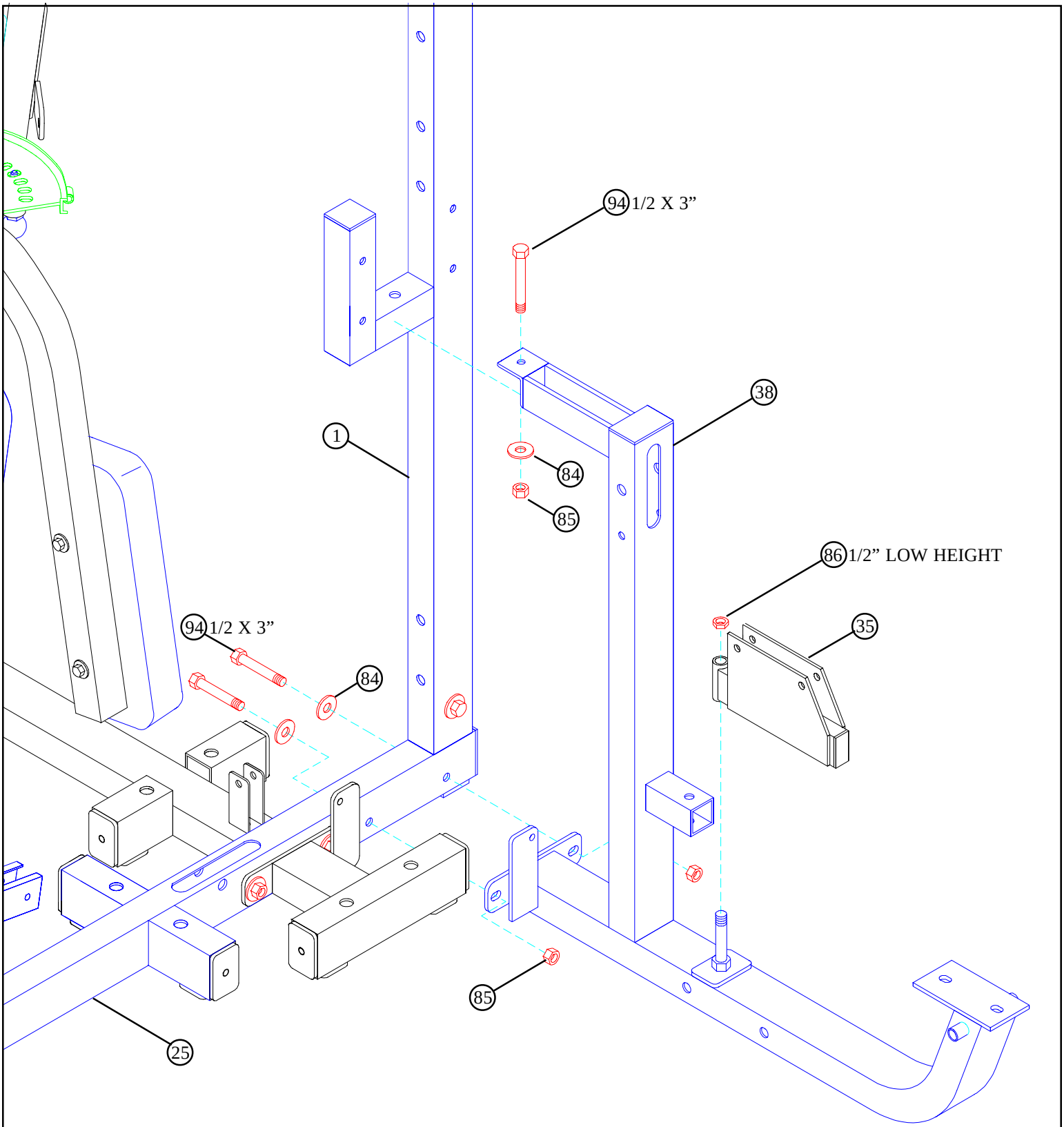


FIGURE 6

STEP 6:

- **SECURELY** assemble the PRESS BASE (38) to the BASE (25) using two 1/2 X 3” BOLTS (94), two 1/2” WASHERS (84), and two 1/2” LOCK NUTS (85), and to the REAR UPRIGHT (1) using one 1/2 X 3” BOLT (94), one 1/2” WASHER (84), and one 1/2” LOCK NUT (85) as shown in FIGURE 6.

- Assemble the SWIVEL PULLEY BRACKET (35) to the PRESS BASE (38) using one 1/2” LOW HEIGHT LOCK NUT (86) as shown in FIGURE 6. **(NOTE: Securely tighten, then back nut off 1/4 turn to allow the SWIVEL PULLEY BRACKET to rotate freely.)**

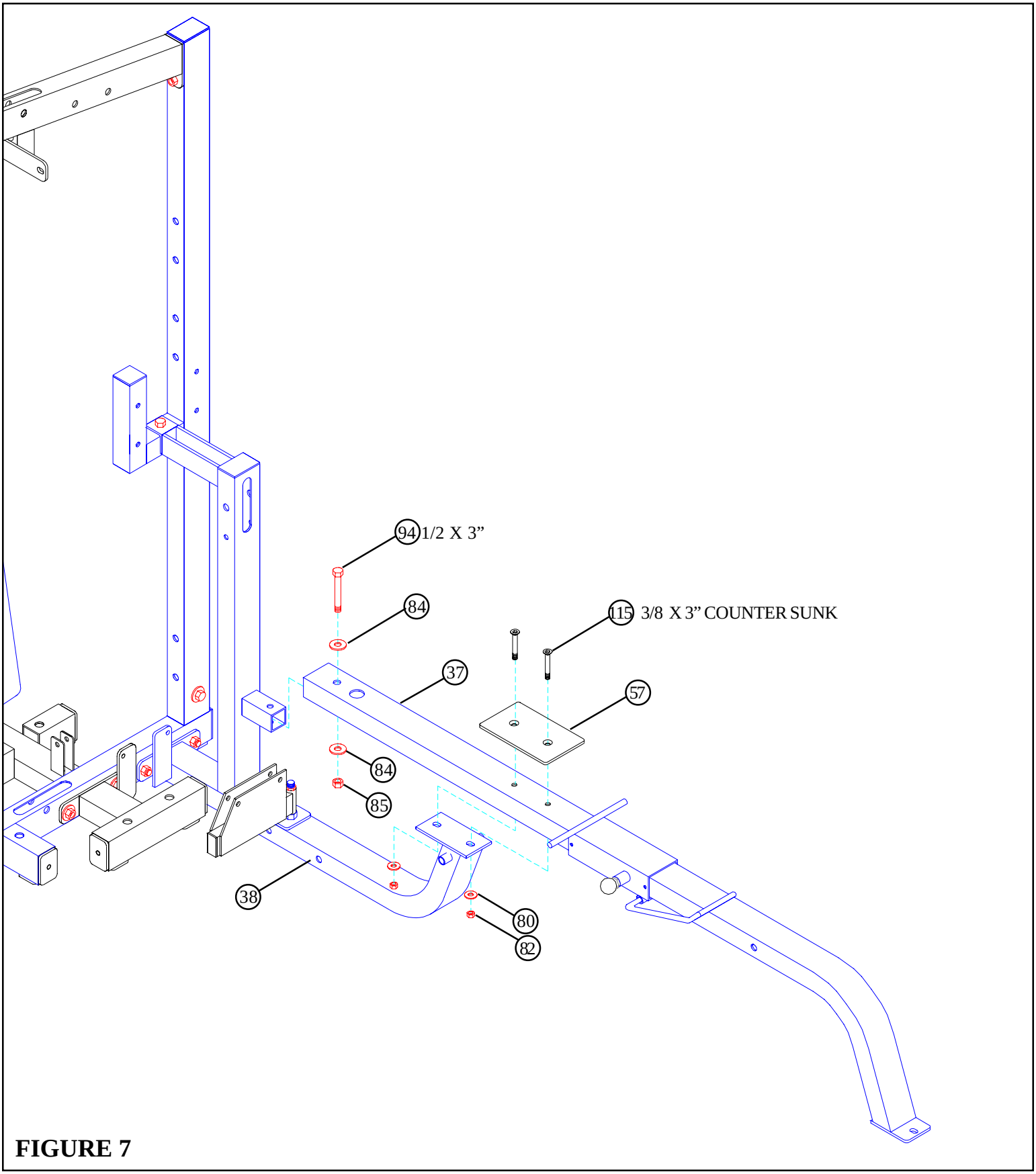
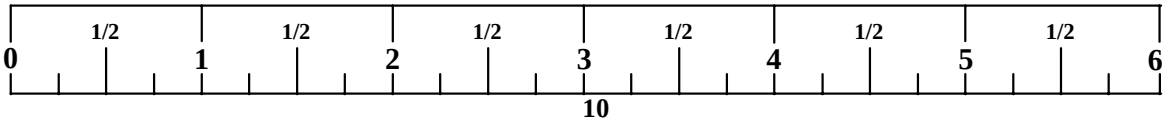


FIGURE 7

STEP 7:

- **SECURELY** assemble the PRESS FRAME (37) to the PRESS BASE (38) using one 1/2” X 3” BOLT (94), two 3/8 X 3” COUNTERSUNK BOLTS (115), one 4-1/2” X 8” PLATE (57), two 1/2” WASHERS (84), two 3/8” WASHERS (80), one 1/2” LOCK NUT (85), and two 3/8” LOCK NUTS (82). **(NOTE: Make sure 3/8” countersunk bolts are facing down.)** See FIGURE 7.



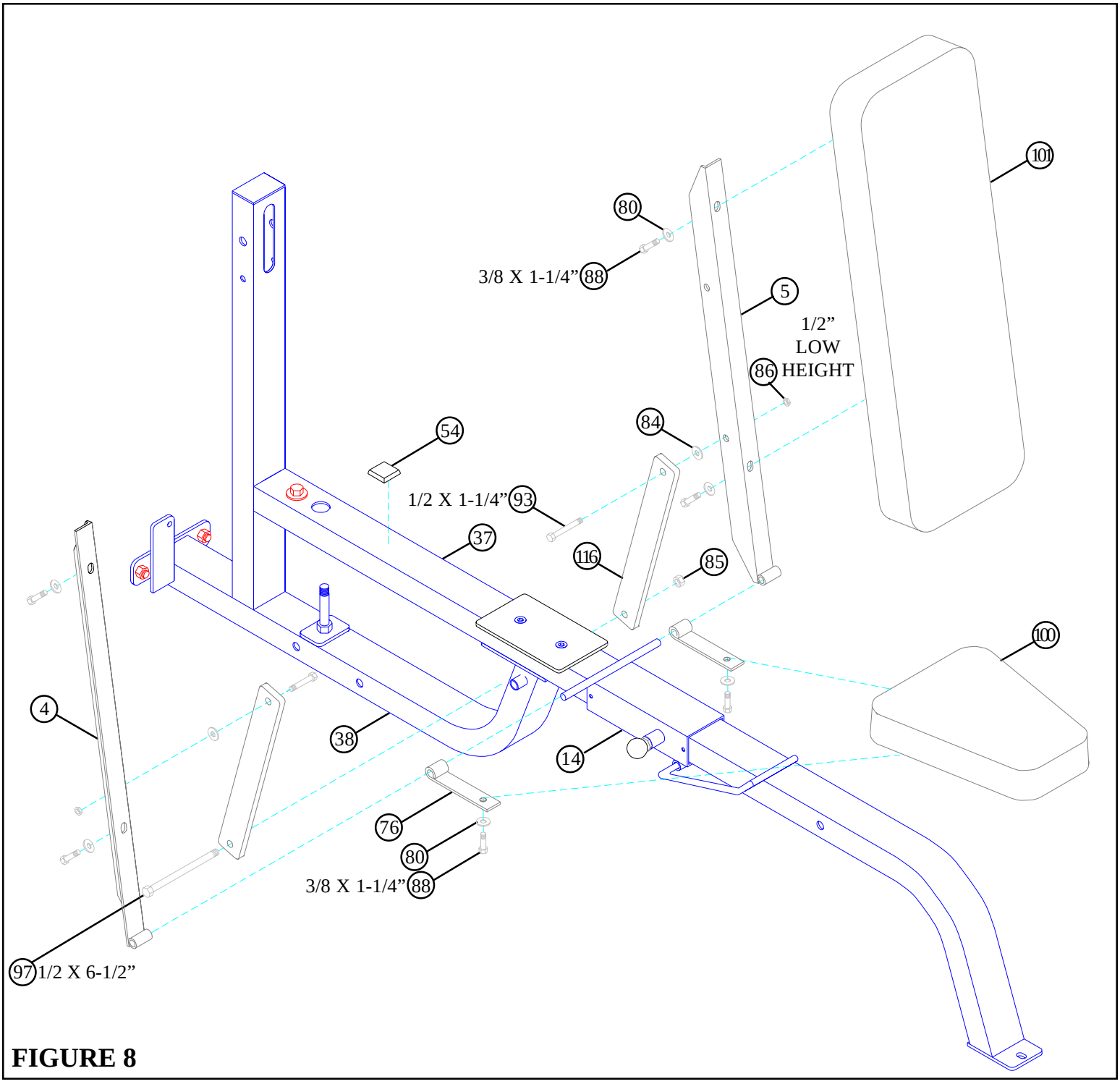


FIGURE 8

STEP 8:

- Slide two HINGE TABS (76) onto the WOLFF SLEEVE (14) and **SECURELY** attach PRESS SEAT PAD (100) using two 3/8 X 1-1/4" BOLTS (88) and two 3/8" WASHERS (80). **(NOTE: The "hinge" part of the HINGE TAB (76) should face upward as shown in FIGURE 8.)**
- Slide the RIGHT BACK PAD ANGLE (5) and LEFT BACK PAD ANGLE (4) onto the WOLFF SLEEVE (14) and attach the PRESS BACK PAD (101) using four 3/8 X 1-1/4" BOLTS (88) and four 3/8" WASHERS (80). See FIGURE 8.
- **SECURE** two 2 X 15-1/2" PLATES (56) to the RIGHT BACK PAD ANGLE (5) and the LEFT BACK PAD ANGLE (4) using two 1/2 X 1-1/4" BOLTS (93), two 1/2" WASHERS (84) and two 1/2" LOW HEIGHT LOCK NUTS (86). **(NOTE: SECURE lock nuts, then back off 1/4 turn.)**
- **SECURE** the 2 X 15-1/2" PLATES (56) to the bushing in the PRESS BASE (38) using one 1/2 X 6-1/2" BOLT (97) and one 1/2" LOCK NUT (85) as shown in FIGURE 8.
- Apply one 1-1/4" RUBBER BUMPER (54) to the PRESS FRAME (37) where the back of the pad comes in contact with the frame.

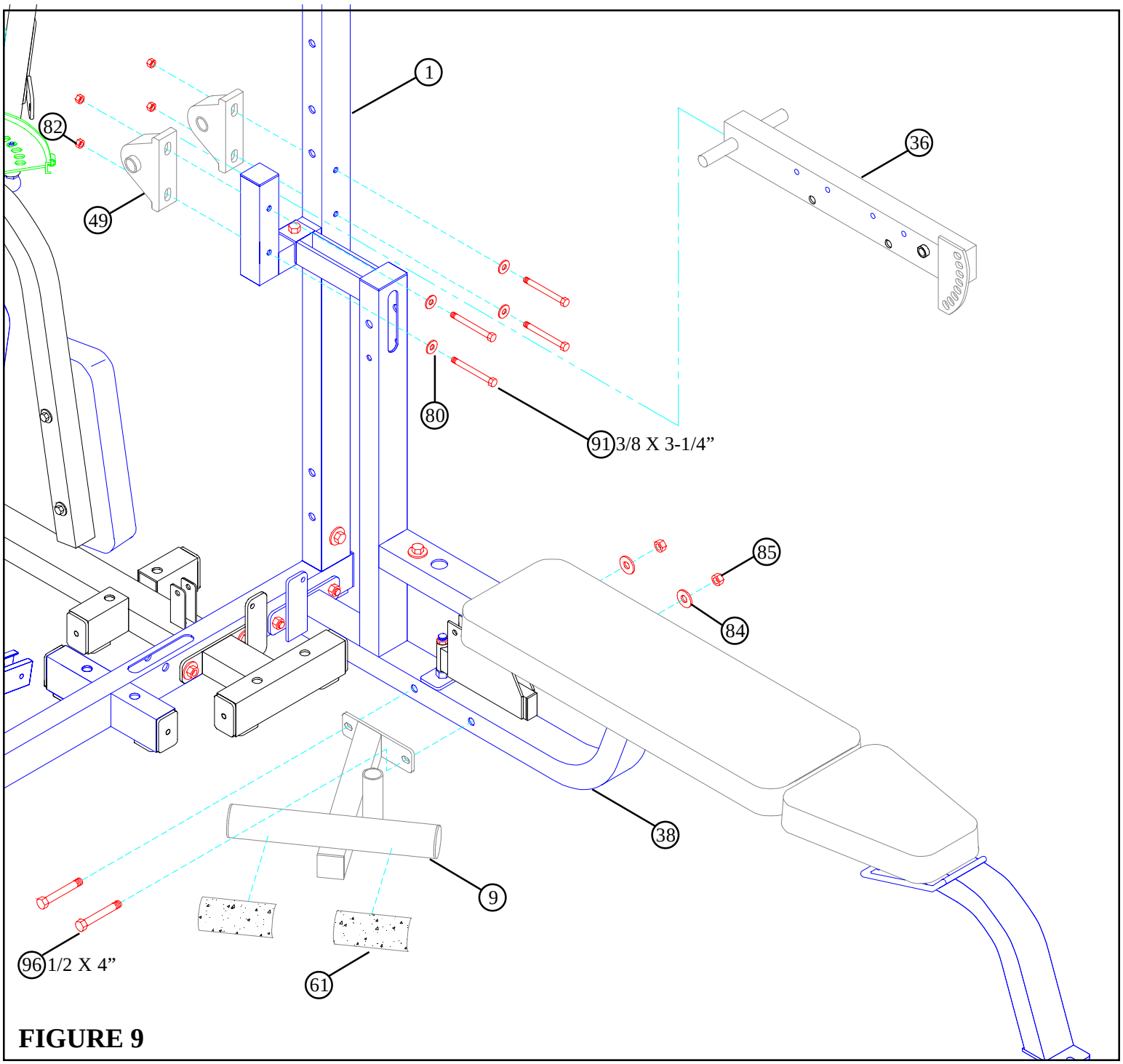
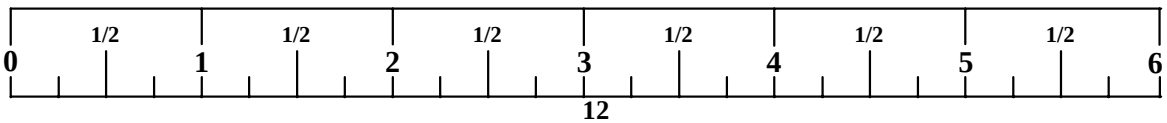


FIGURE 9

STEP 9:

- **LOOSELY** assemble the PRESS ARM ADJUST (36) to the REAR UPRIGHT (1) using two 1” PILLOW BLOCK BEARINGS (49), four 3/8 X 3-1/4” BOLTS (91), four 3/8” WASHERS (80), and four 3/8” LOCK NUTS (82). **(NOTE: Assemble PILLOW BLOCKS (49) so the set screws are on the outside, this will allow more adjustment.)** See FIGURE 9.
- Center PRESS ARM ADJUST (36) to line up with the post on the PRESS BASE (38) and securely tighten set screws on the PILLOW BLOCK BEARINGS (49). See FIGURE 9.
- Adjust the PILLOW BLOCK BEARINGS (49) until the PRESS ARM ADJUST (36) is level, then **SECURELY** tighten bolts.
- **SECURELY** assemble CALF/LOW ROW (9) to the PRESS BASE (38) using two 1/2 X 4” BOLTS (96), two 1/2” WASHERS (84), and two 1/2” LOCK NUTS (85) as shown in FIGURE 9.
- Apply two NON-SKID STRIPS (61) to the CALF/LOW ROW (9) as shown in FIGURE 9.



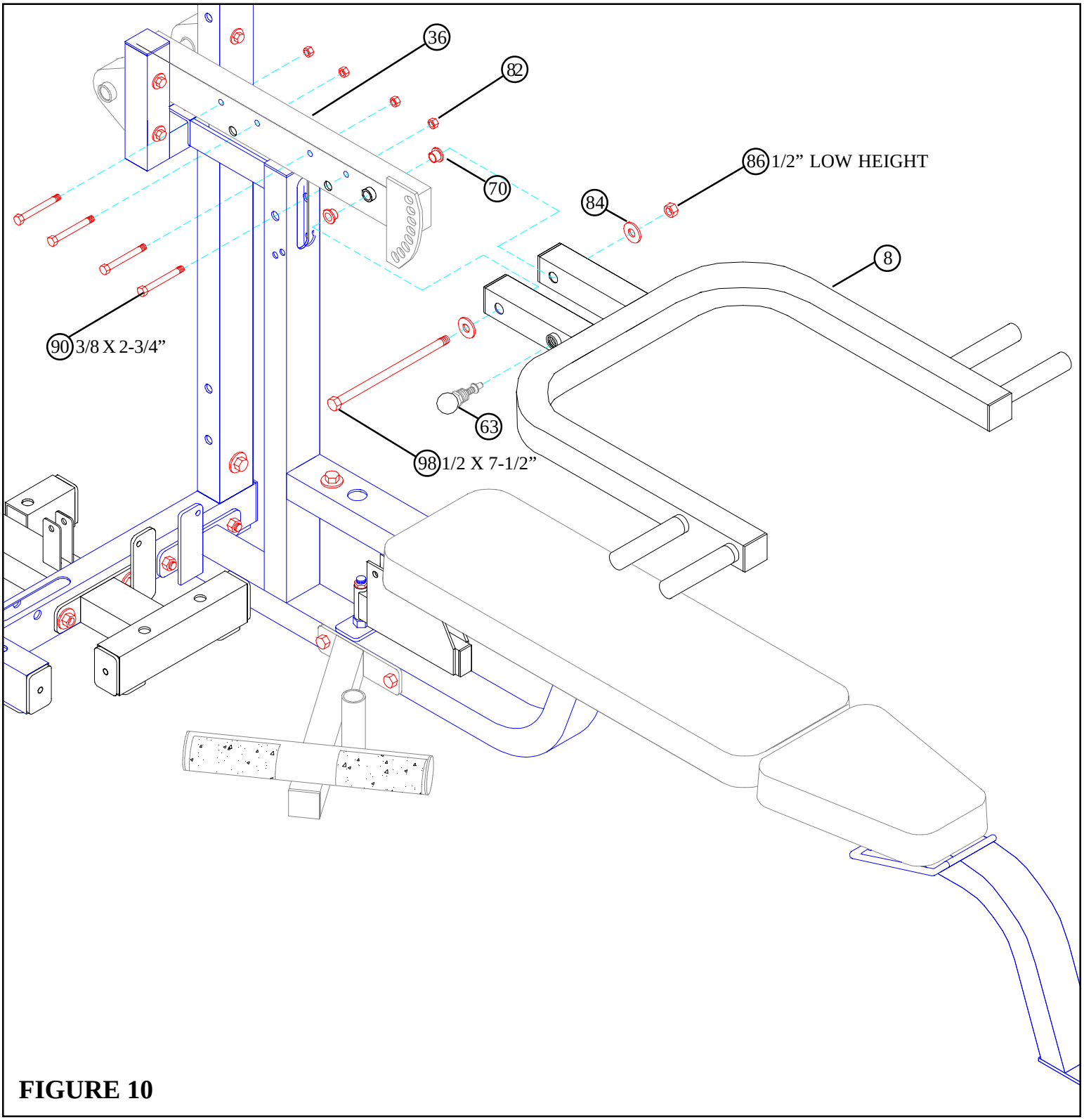


FIGURE 10

STEP 10:

- **SECURELY** assemble one 1/2 X 3-1/2" SPRING PIN (63) to the PRESS ARM (8) as shown in FIGURE 10.
- **SECURELY** assemble the PRESS ARM (8) to the PRESS ARM ADJUST (36) using one 1/2 X 7-1/2" BOLT (98), two 1/2" WASHERS (84), two 1/2" FLANGE BEARINGS (70), and one 1/2" LOW HEIGHT LOCK NUT (86). **(NOTE: SECURELY tighten, then back nut off 1/4 to allow the PRESS ARM to rotate freely.)**
- **SECURELY** assemble four 3/8 X 2-3/4" BOLTS (90) and four 3/8" LOCK NUTS (82) to the PRESS ARM ADJUST (36) as sjown in FIGURE 10.

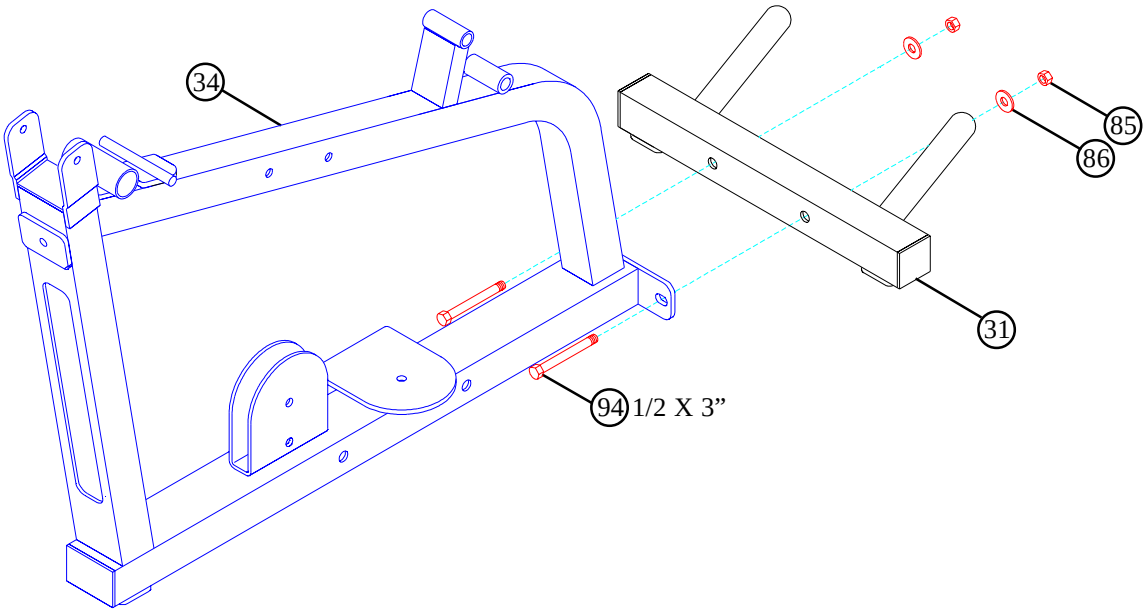


FIGURE 11

STEP 11:

- **SECURELY** assemble the REAR BASE LEG (31) to the LEG FRAME (34) using two 1/2 X 3” BOLTS (94), two 1/2” WASHERS (84), and two 1/2” LOCK NUTS (85) as shown in FIGURE 11.

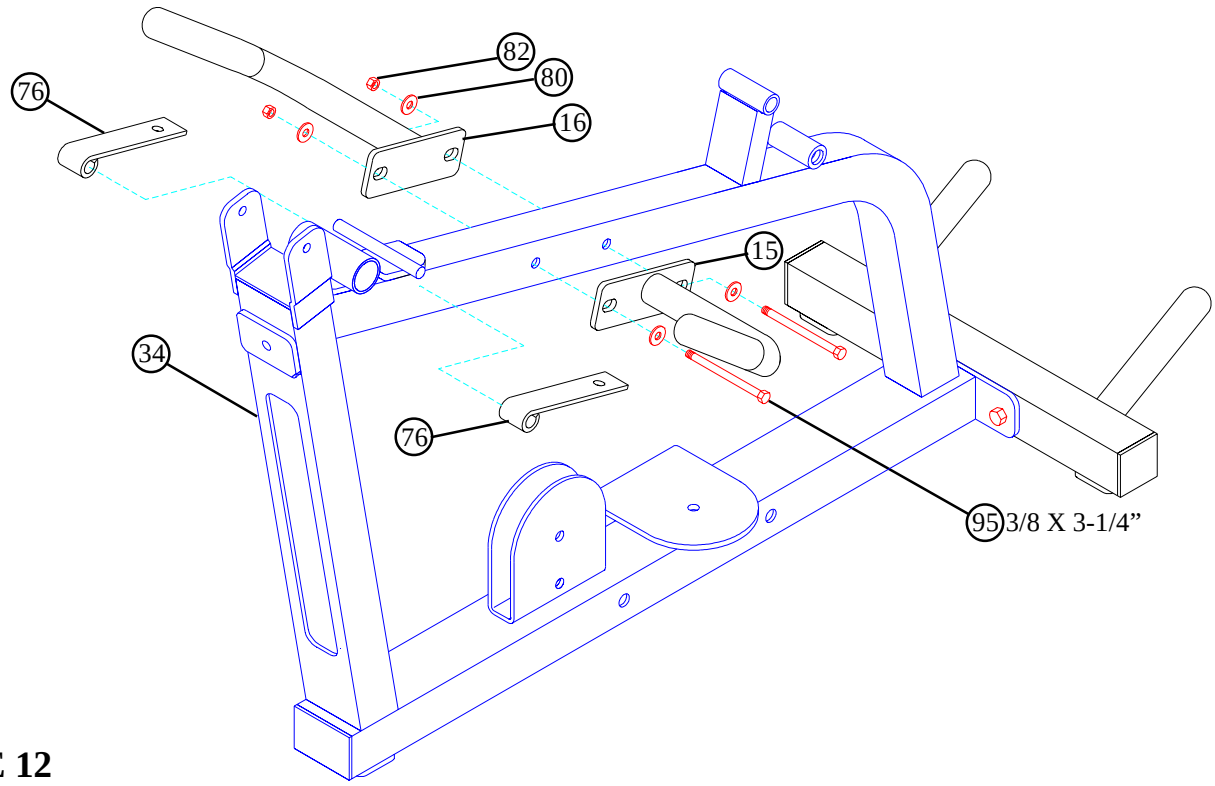
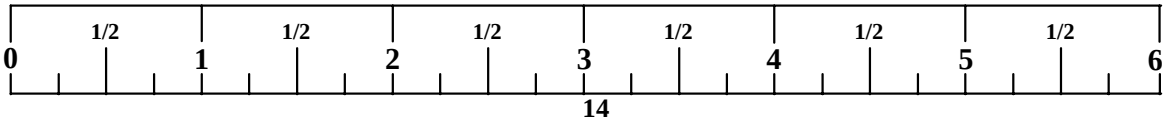


FIGURE 12

STEP 12:

- **SECURELY** assemble the LEFT & RIGHT LEG EXTENSION HANDLES (16 & 15) to the LEG FRAME (34) using two 3/8 X 3-1/4” BOLTS (91), four 3/8” WASHERS (80), and two 3/8” LOCK NUTS (82). See FIGURE 12.
- Slide two HINGE TABS (76) onto the LEG FRAME (34) as shown in FIGURE 12. **(NOTE: The “hinge” part of the HINGE TAB should face downward.)**



STEP 13:

- **SECURELY** assemble one 2 X 8" PLATE (17) to the LEG SEAT PAD (102) using two 3/8 X 1-1/4" BOLTS (88) and two 3/8" WASHERS (80). See FIGURE 13.
- Apply one 1-1/4" RUBBER BUMPER (54) to the 2 X 8" PLATE (17) as shown in FIGURE 13.

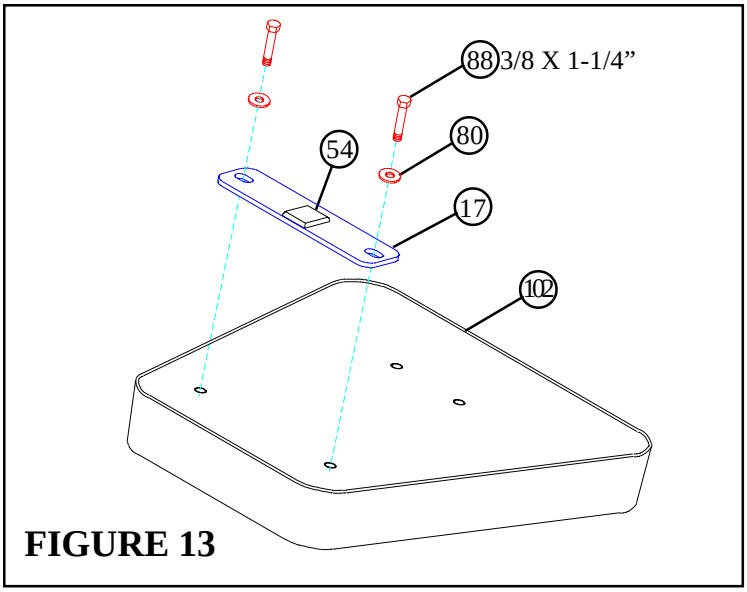


FIGURE 13

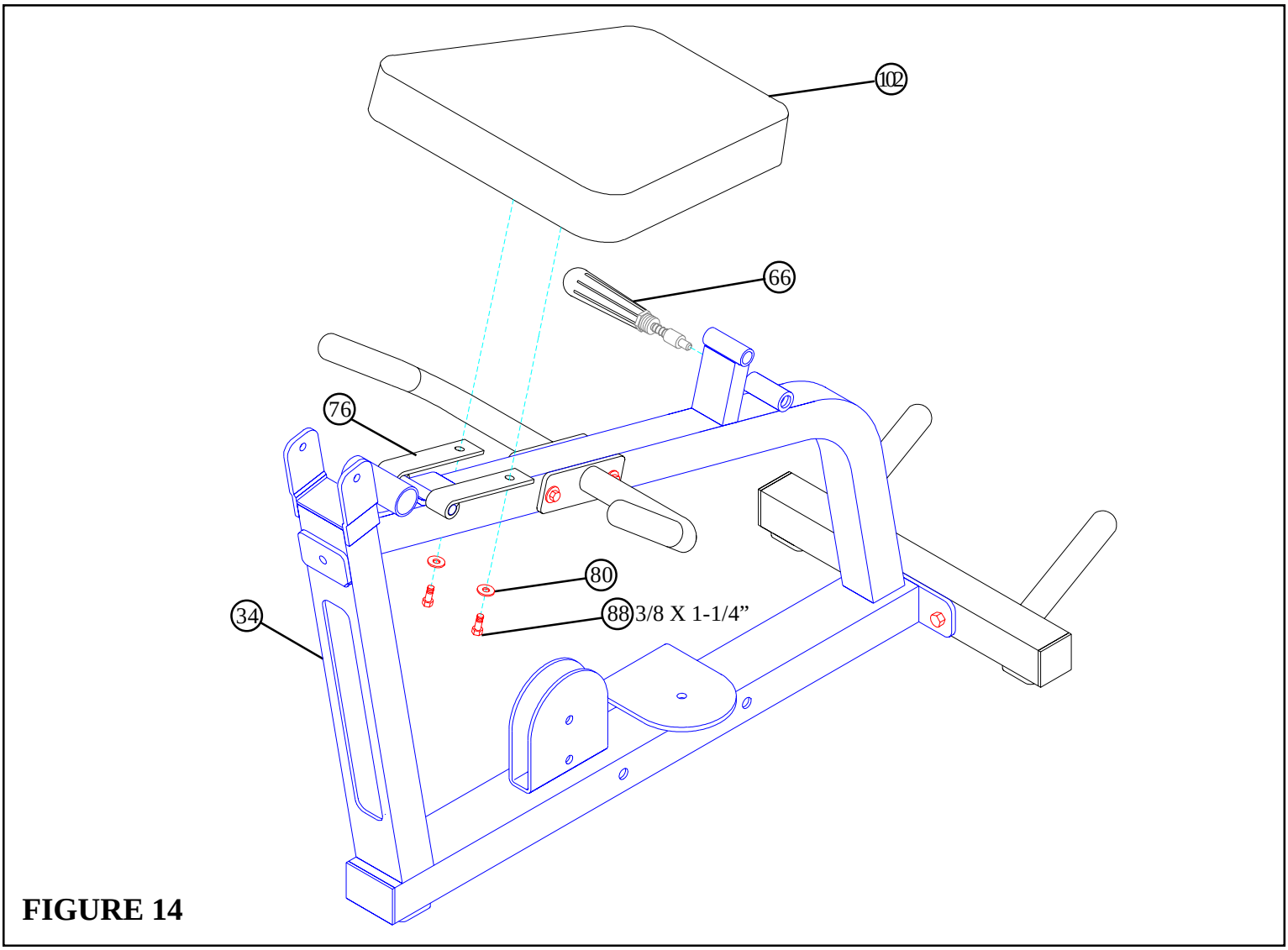


FIGURE 14

STEP 14:

- **SECURELY** assemble the LEG SEAT PAD (102) to the HINGE TABS (76) using two 3/8 X 1-1/4" BOLTS (88) and two 3/8" WASHERS (80). See FIGURE 14.
- **SECURELY** assemble one 1/2 X 7-7/8" SPRING PIN (66) to the LEG FRAME (34) as shown in FIGURE 14.

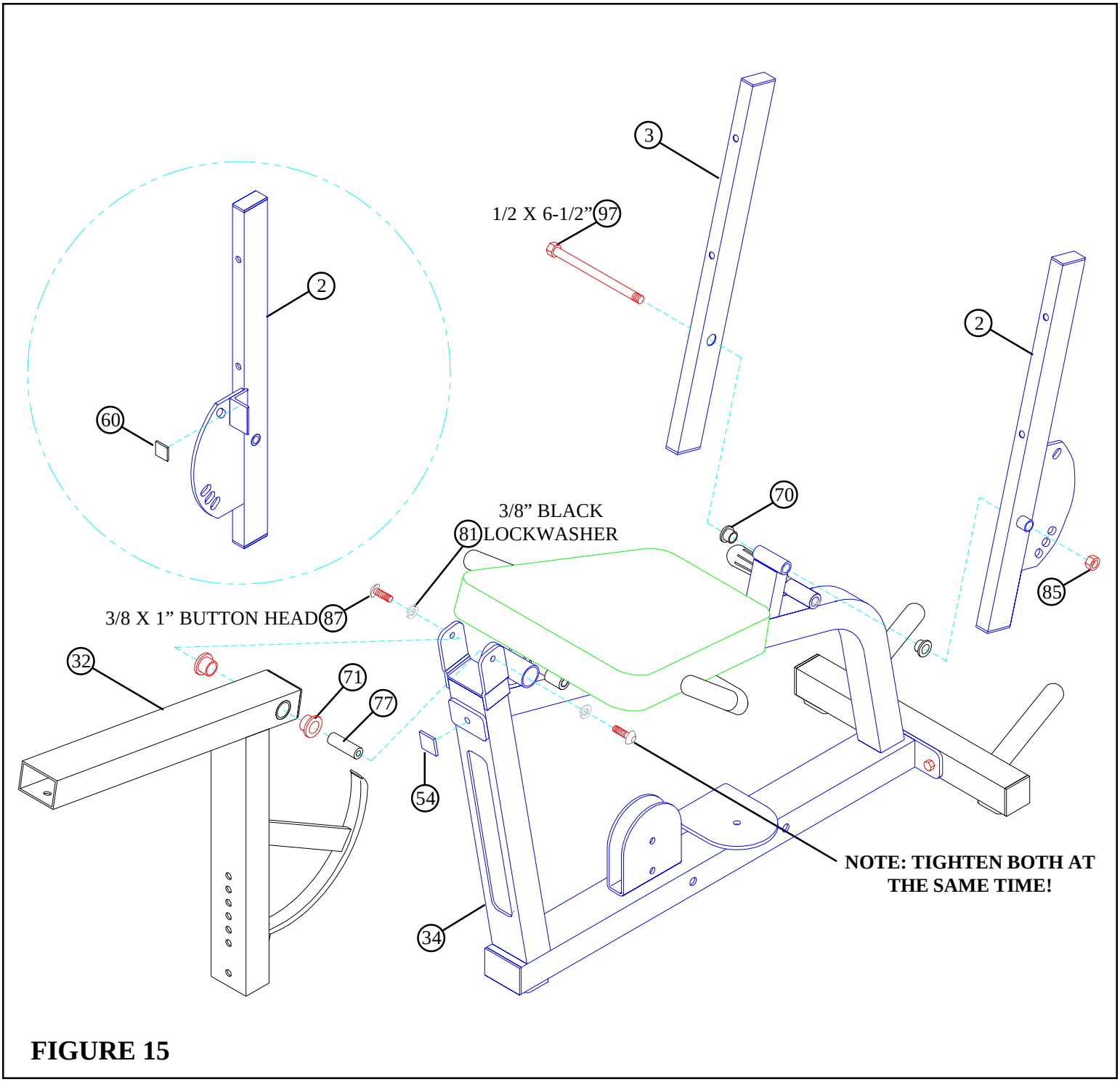
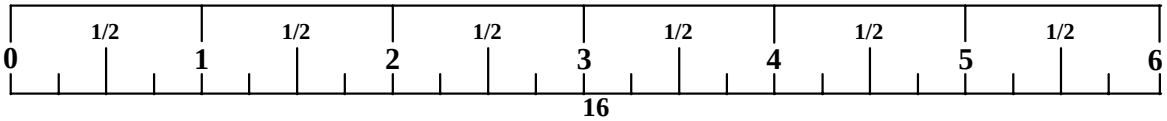


FIGURE 15

STEP 15:

- **SECURELY** assemble one 1 X 1" GLIDE (60) to the angle on the BACK PAD ADJUST (2) as shown in FIGURE 15.
- Assemble LEG BACK PAD ADJUST (2) and LEG BACK PAD SUPPORT (3) to the LEG FRAME (34) using one 1/2 X 6-1/2" BOLT (97), two 1/2" FLANGE BEARINGS (70), one 1/2" LOCK NUT (85) as shown in FIGURE 15. **(NOTE: Securely tighten, then back nut off 1/4 turn to allow the two parts to rotate freely.)**
- **SECURELY** assemble the LEG CURL/EXTENSION (32) to the LEG FRAME (34) using two 3/4" FLANGE BEARINGS (71), one 3/4" TAPPED SHAFT (77), two black 3/8" LOCK WASHERS (81), and two 3/8 X 1" BLACK BUTTON HEAD CAP SCREWS (87). **(NOTE: Both CAP SCREWS must be tightened at the same time using two allen wrenches.)**
- **SECURELY** assemble one 1-1/4" RUBBER BUMPER (54) to the contact point on the LEG FRAME (34) as shown in FIGURE 15.



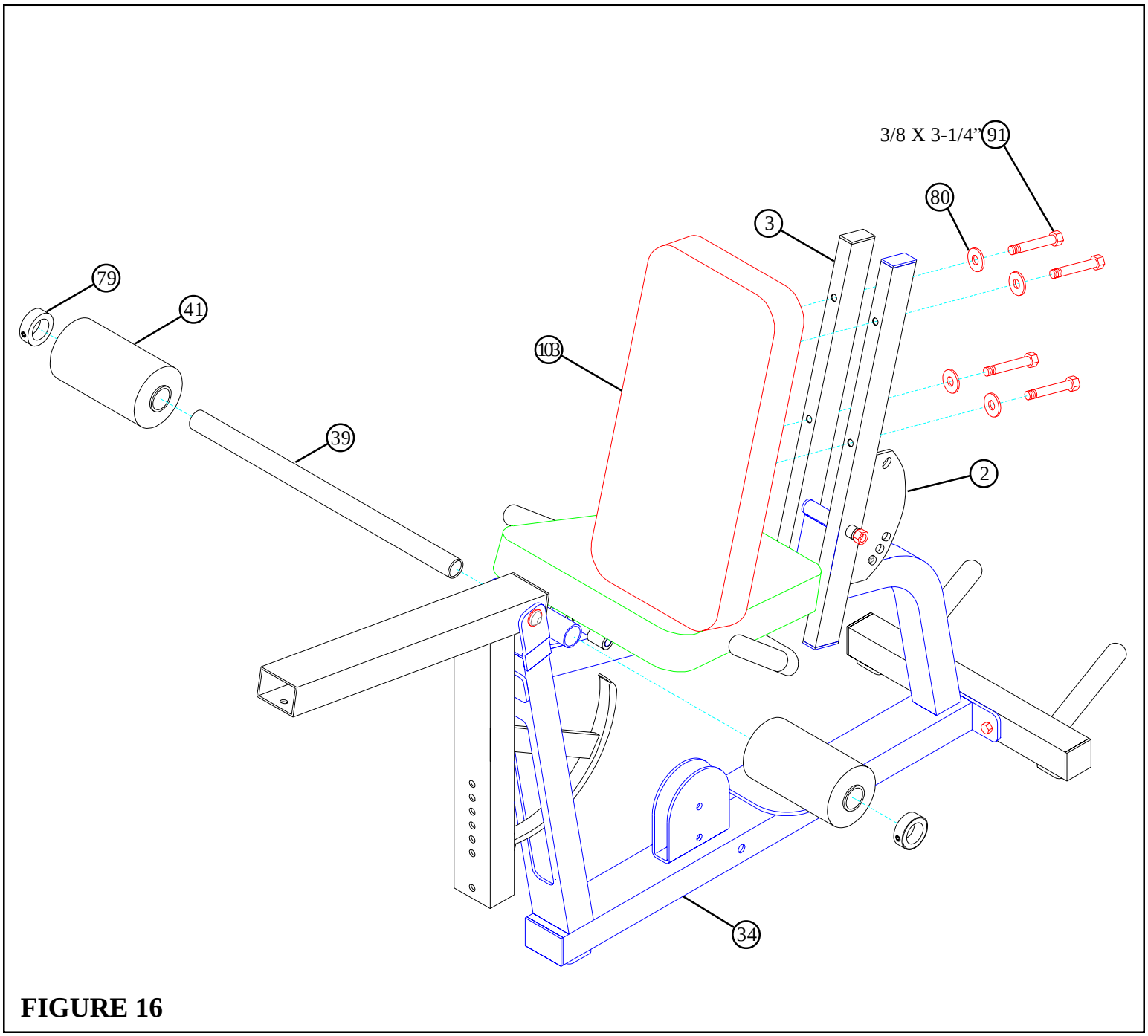


FIGURE 16

STEP 16:

- **SECURELY** assemble the LEG BACK PAD (103) to the LEG BACK PAD ADJUST (2) and the LEG BACK PAD SUPPORT (3) using four 3/8 X 3-1/4” BOLTS (91) and four 3/8” WASHERS (80). See FIGURE 16.

- **SECURELY** assemble two 4 X 7” ROLLER PADS (41) to the LEG FRAME (34) using one 19-1/4” TUBE (39) and two 1-5/16” SHAFT COLLARS (79). **SECURELY** tighten set screws on SHAFT COLLARS (79). See FIGURE 16.

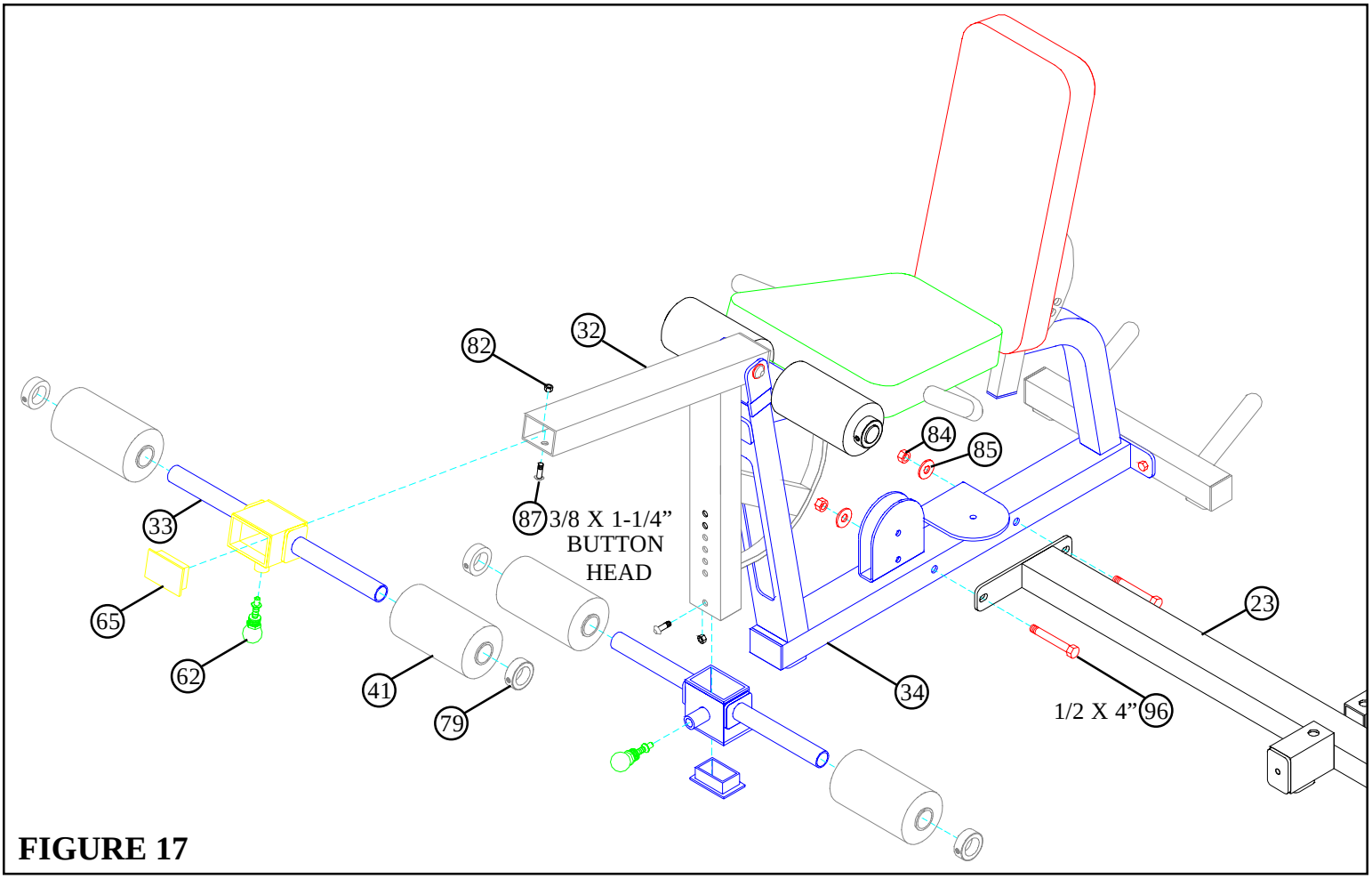


FIGURE 17

STEP 17:

- **SECURELY** assemble two 3/8 X 2-3/4" SPRING PINS (62) to the PAD SLEEVES (33) as shown in FIGURE 17.
- Assemble four ROLLER PADS (41) to the PAD SLEEVES (33) using four 1-5/16" SHAFT COLLARS (79). **SECURELY** tighten set screws on SHAFT COLLARS (79). See FIGURE 16.
- Slide PAD SLEEVES (33) over LEG CURL/EXTENSION (32) until the spring pin pops into the holes. **(NOTE: PAD SLEEVES should be facing as shown in FIGURE 17.)**
- **SECURELY** assemble two 3/8 X 1" BUTTON HEAD CAP SCREWS (87) and two 3/8" LOCK NUTS (82) to the last holes in the LEG CURL/EXTENSION (32) as shown in FIGURE 17.
- Insert two 3 X 2" END CAPS (65) into the ends of the LEG CURL/EXTENSION (32) as shown in FIGURE 17.
- **SECURELY** assemble LEG FRAME (34) to the LEG WEIGHT STACK BASE (23) using two 1/2 X 4" BOLTS (96), two 1/2" WASHERS (84), and two 1/2" LOCK NUTS (85). See FIGURE 17.

STEP 18:

- Snap two WEIGHT PLATE BUSHINGS (109) into the top side of all sixty WEIGHT PLATES (106) as shown in FIGURE 18.

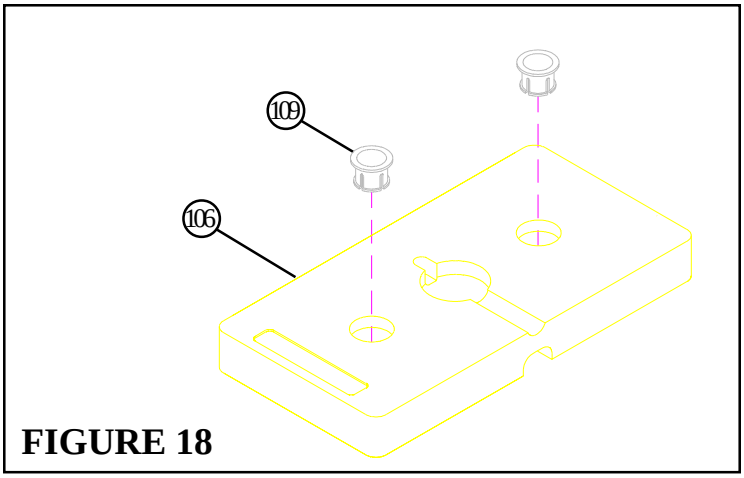


FIGURE 18

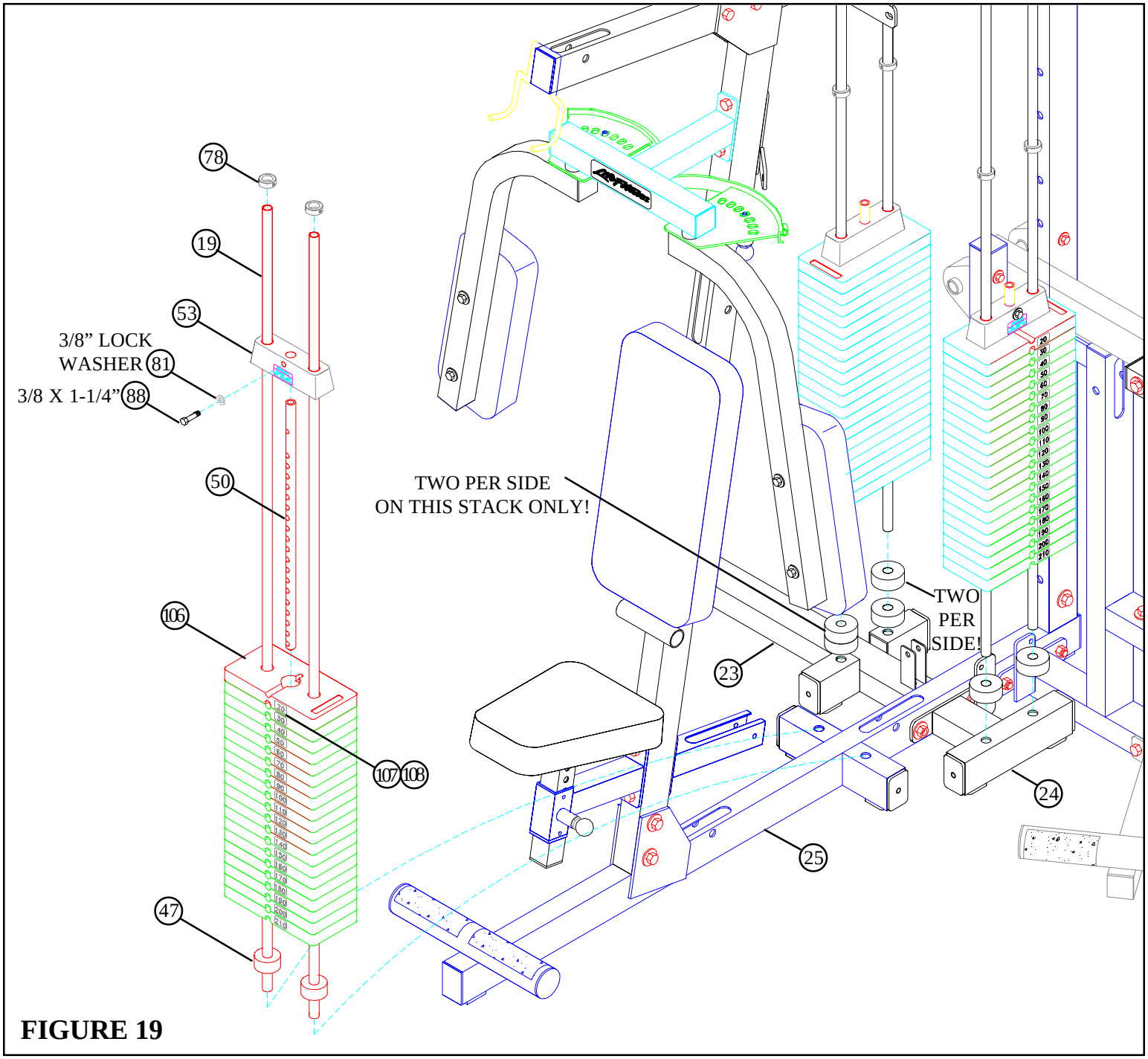


FIGURE 19

STEP 19:

- Insert the two GUIDE RODS (19) into the BASE (25) as shown in FIGURE 19. Lubricate the GUIDE RODS (19) with a slicon or teflon spray that is available at most hardware stores.
- Slide two WEIGHT STACK CUSHIONS (47) down over the GUIDE RODS (19). See FIGURE 19.
- Using **EXTREME CARE** slide twenty WEIGHT PLATES (106) down over the GUIDE RODS (19) with the the key-hole facing as shown in FIGURE 19.
- **SECURELY** assemble the WEIGHT STACK SHAFT (50) to the HEAD PLATE (53) using one 3/8 X 1-1/4" BOLT (88) and one 3/8" BLACK LOCK WASHER (81). **(Note: The bolt hole in the HEAD PLATE (53) should be on top.)**
- Carefully Slide the HEAD PLATE ASSEMBLY down over the GUIDE RODS (19) onto the weight stack as shown.
- Apply one set of WEIGHT STACK LABELS - LBS. OR NUMBERED 1-20 (107) (108) to each WEIGHT PLATE (106). See FIGURE 19.
- Slide two 13/16" SHAFT COLLARS (78) over the GUIDE RODS (19) as shown in FIGURE 19.
- REPEAT the above steps to assemble the weight stacks on the PRESS WEIGHT STACK BASE (24) and the LEG WEIGHT STACK BASE (23). **(NOTE: Use four WEIGHT STACK CUSHIONS (47) (two per guide rod!) on the LEG WEIGHT STACK BASE (23) as shown in FIGURE 19.)**

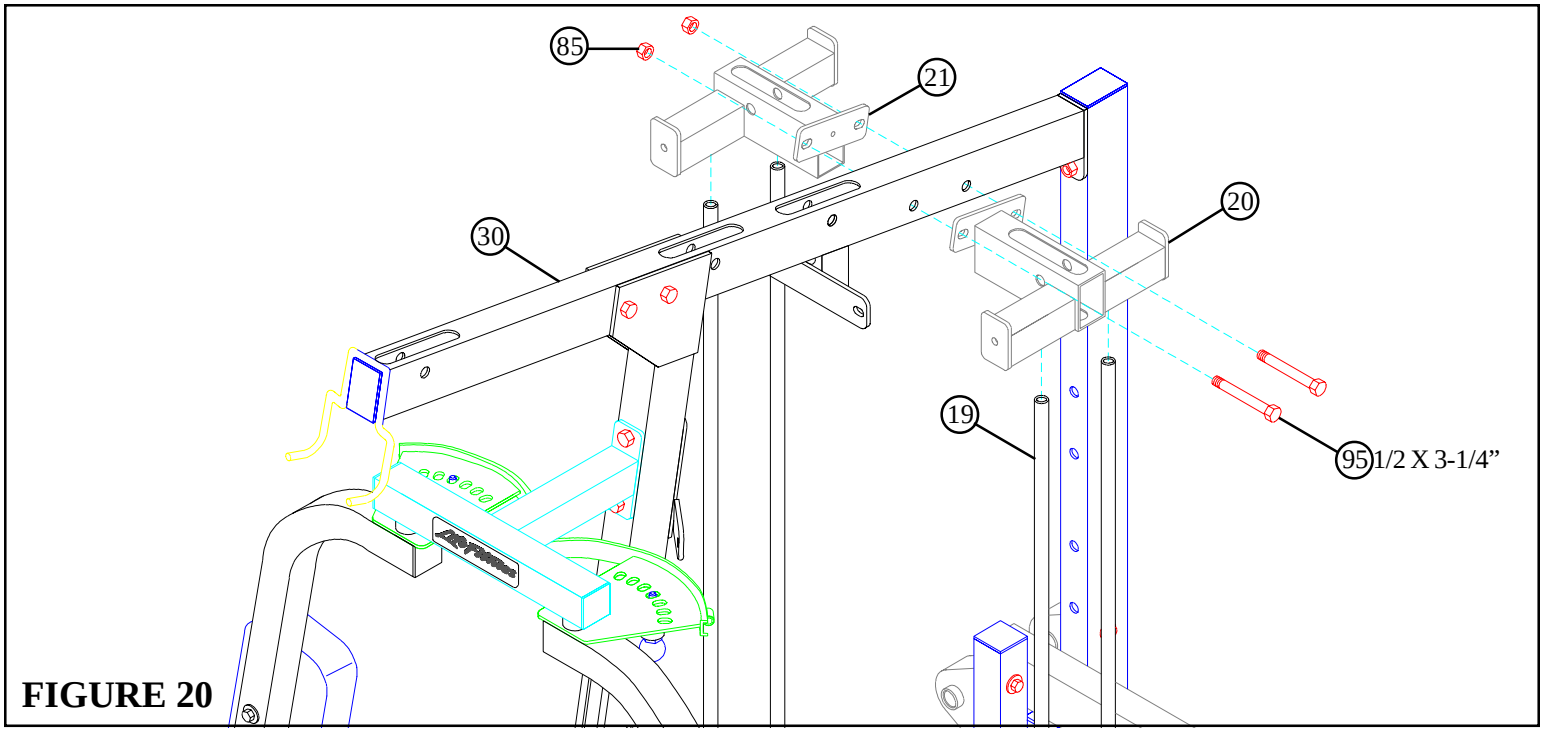


FIGURE 20

STEP 20:

- Slide the PRESS GUIDE ROD SUPPORT (20) and LEG GUIDE ROD SUPPORT (21) over their respective GUIDE RODS (19) and **SECURELY** assemble them to the TOP BOOM (30) using two 1/2 X 3-1/4” BOLTS (91) and two 1/2” LOCK NUTS (85) as shown in FIGURE 20.

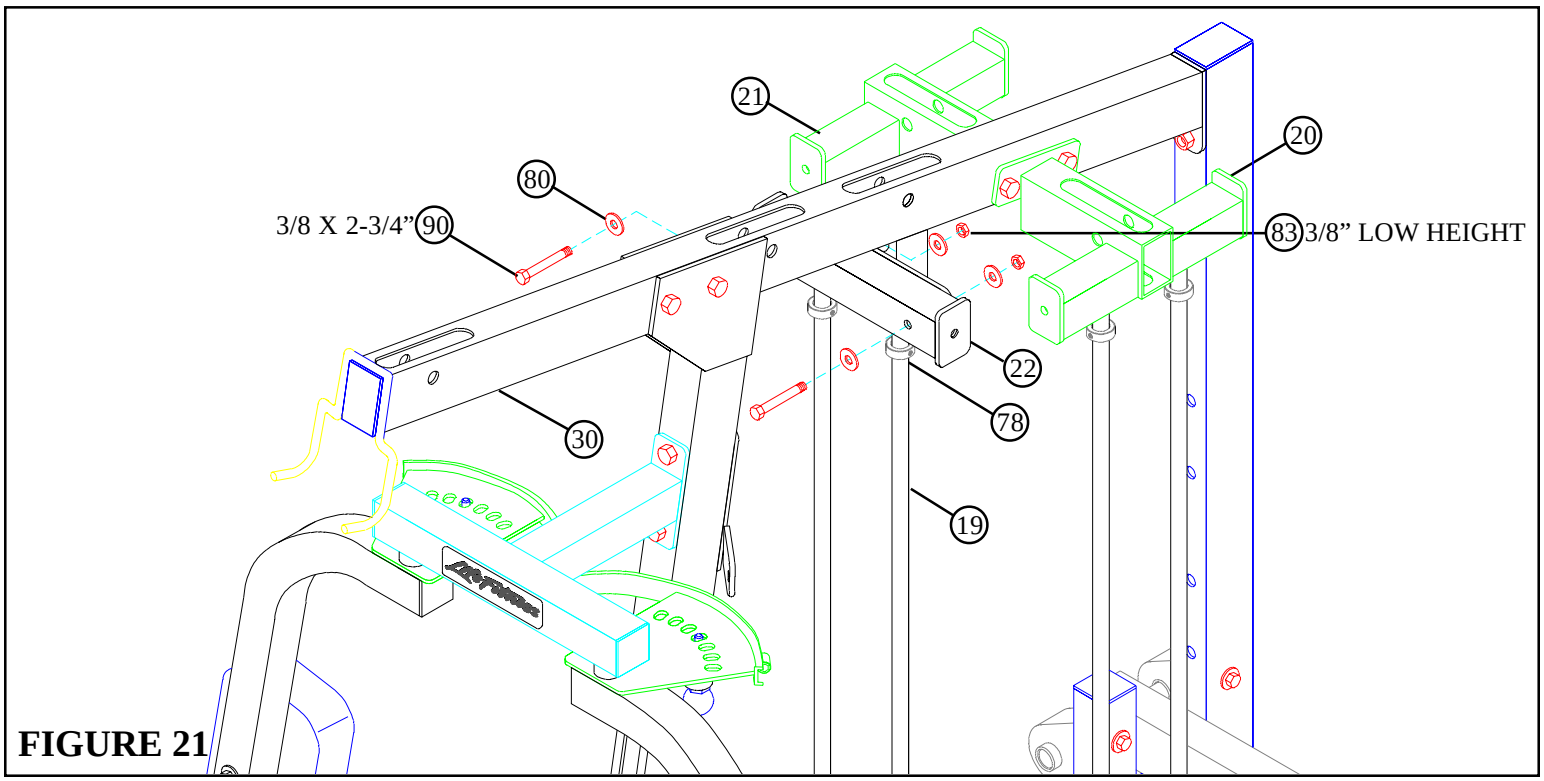
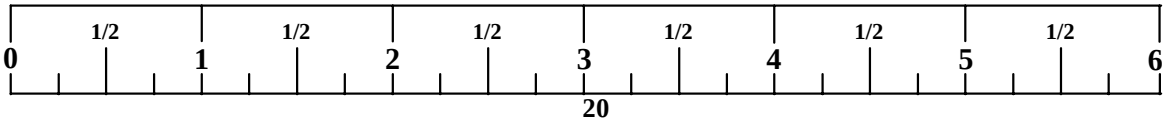


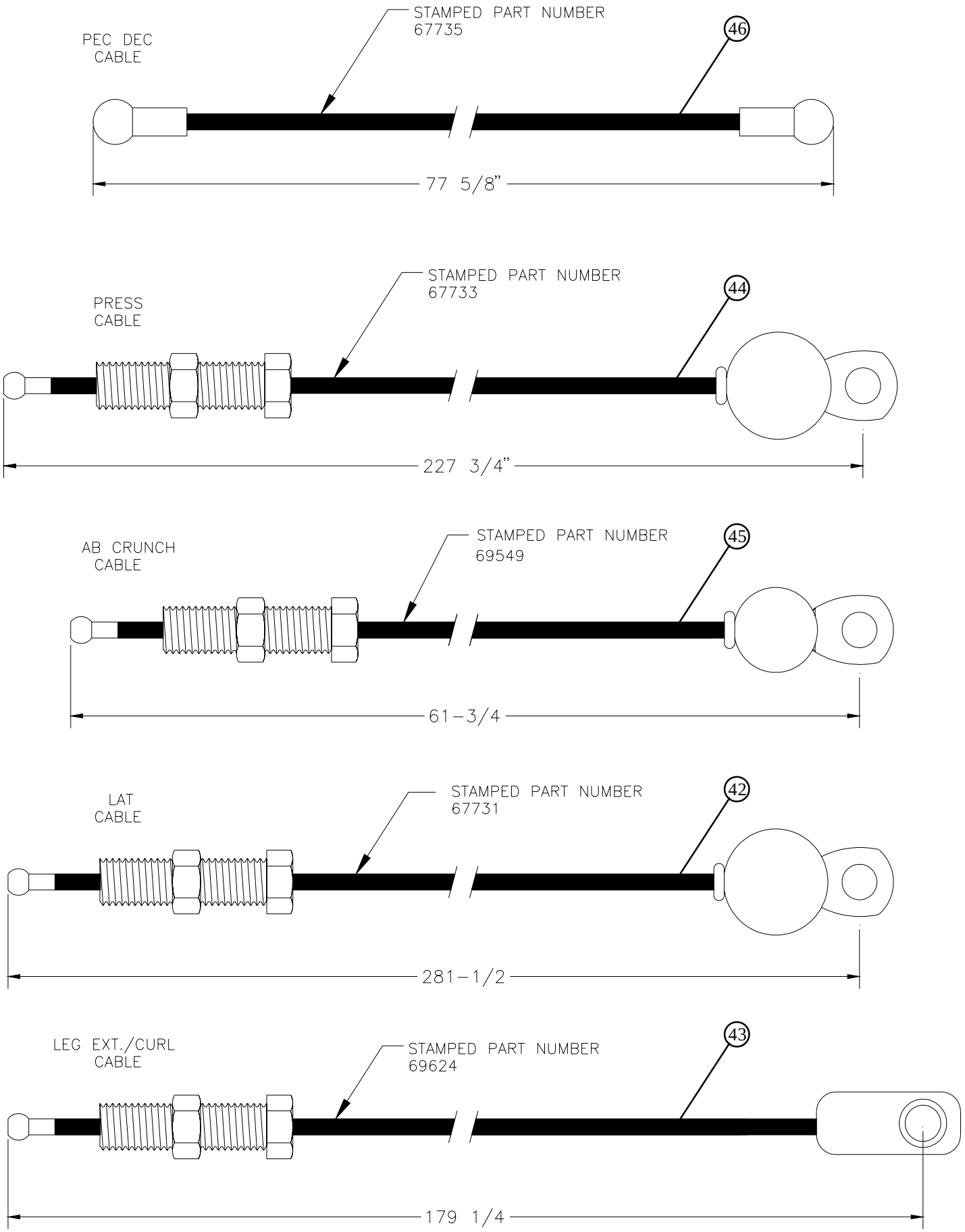
FIGURE 21

STEP 21:

- Slide the PEC GUIDE ROD SUPPORT (22) onto the GUIDE RODS (19) and **SECURELY** assemble the PEC GUIDE ROD SUPPORT (22) to TOP BOOM (30) using two 3/8 X 2-3/4” BOLTS (90), four 3/8” WASHERS (80), and two 3/8” LOW HEIGHT LOCK NUTS (83). See FIGURE 21.
- Slide the 13/16” SHAFT COLLARS (78) to the top of the GUIDE ROD SUPPORTS (20,21,22) and **SECURELY** tighten the SHAFT COLLARS set screws. See FIGURE 21.



CABLE GUIDE


PEC DEC
CABLE
STAMPED PART NUMBER
67735
46
77 5/8"
PRESS
CABLE
STAMPED PART NUMBER
67733
44
227 3/4"
AB CRUNCH
CABLE
STAMPED PART NUMBER
69549
45
61-3/4
LAT
CABLE
STAMPED PART NUMBER
67731
42
281-1/2
LEG EXT./CURL
CABLE
STAMPED PART NUMBER
69624
43
179 1/4

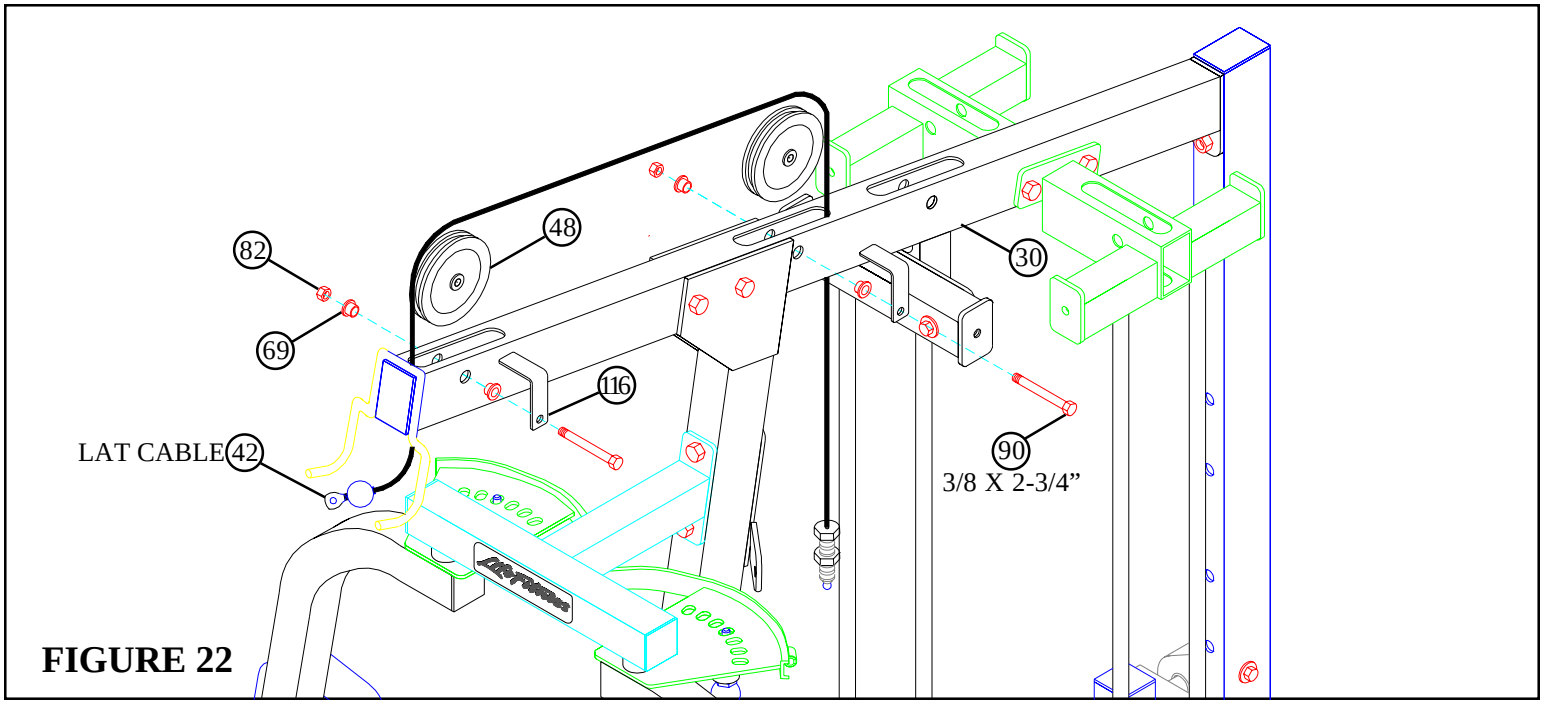


FIGURE 22

STEP 22:

- Route the threaded end of the LAT CABLE (42) through the TOP BOOM (30) as shown in FIGURE 22.
- **SECURELY** assemble two 4-1/2” PULLEYS (48) into the slots of the TOP BOOM (30) using two 3/8 X 2-3/4” BOLTS (90), four 3/8” FLANGE SPACERS (69), two 2-7/8” X 2-1/4” CABLE CLIPS (116) and two 3/8” LOCK NUTS (82). **(NOTE: Loop the cable around each pulley prior to inserting it in the the slot.)**

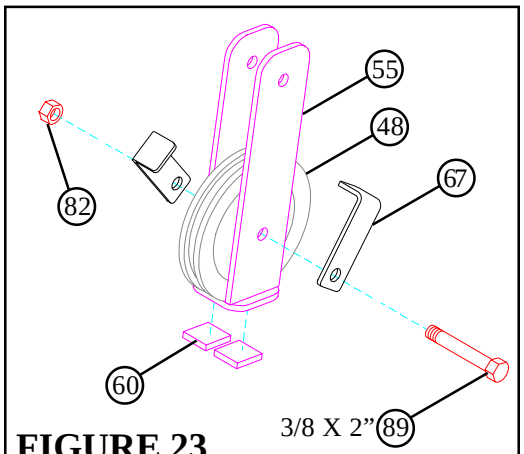


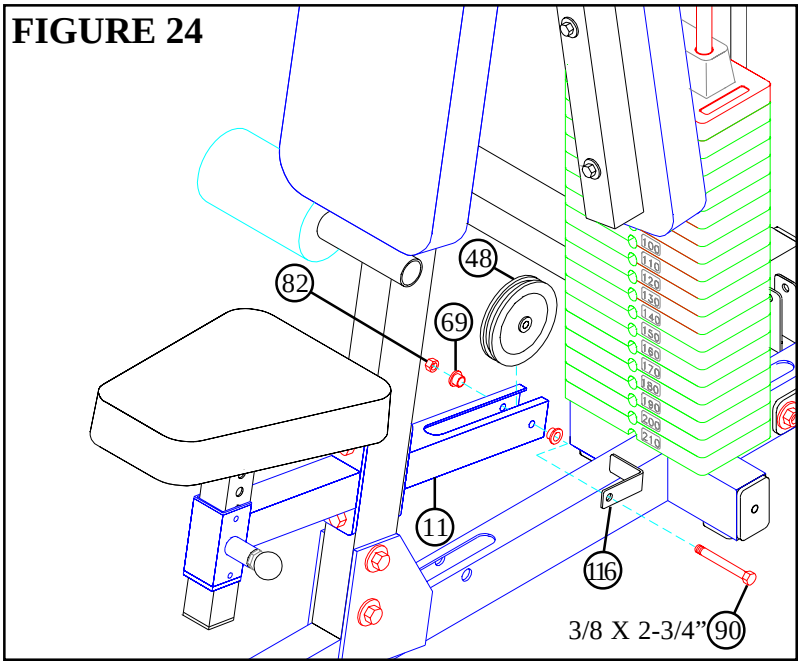
FIGURE 23

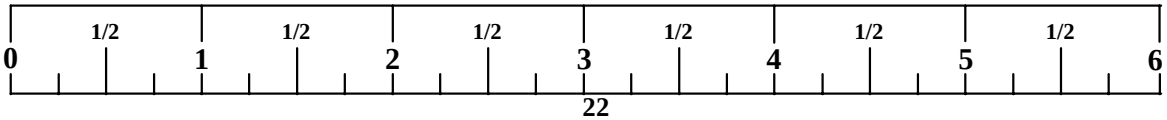
STEP 23:

- **SECURELY** assemble one 4-1/2” PULLEY (48) to the FLOATING PULLEY BRACKET (55) using one 3/8 X 2” BOLT (89), two 2-7/8 X 1” CABLE CLIPS (67) and one 3/8” LOCK NUT (82) as shown in FIGURE 23.
- Apply two 1 X 1” GLIDES (60) to the FLOATING PULLEY BRACKET (55) as shown.

STEP 24:

- **SECURELY** assemble one 4-1/2” PULLEY (48) to the FLOATING PULLEY STOP (10) using one 3/8 X 2-3/4” BOLT (90), one 2-7/8” X 2-1/4” CABLE CLIP (116), two 3/8” FLANGE SPACERS (69), and one 3/8” LOCK NUT (82) as shown in FIGURE 24.





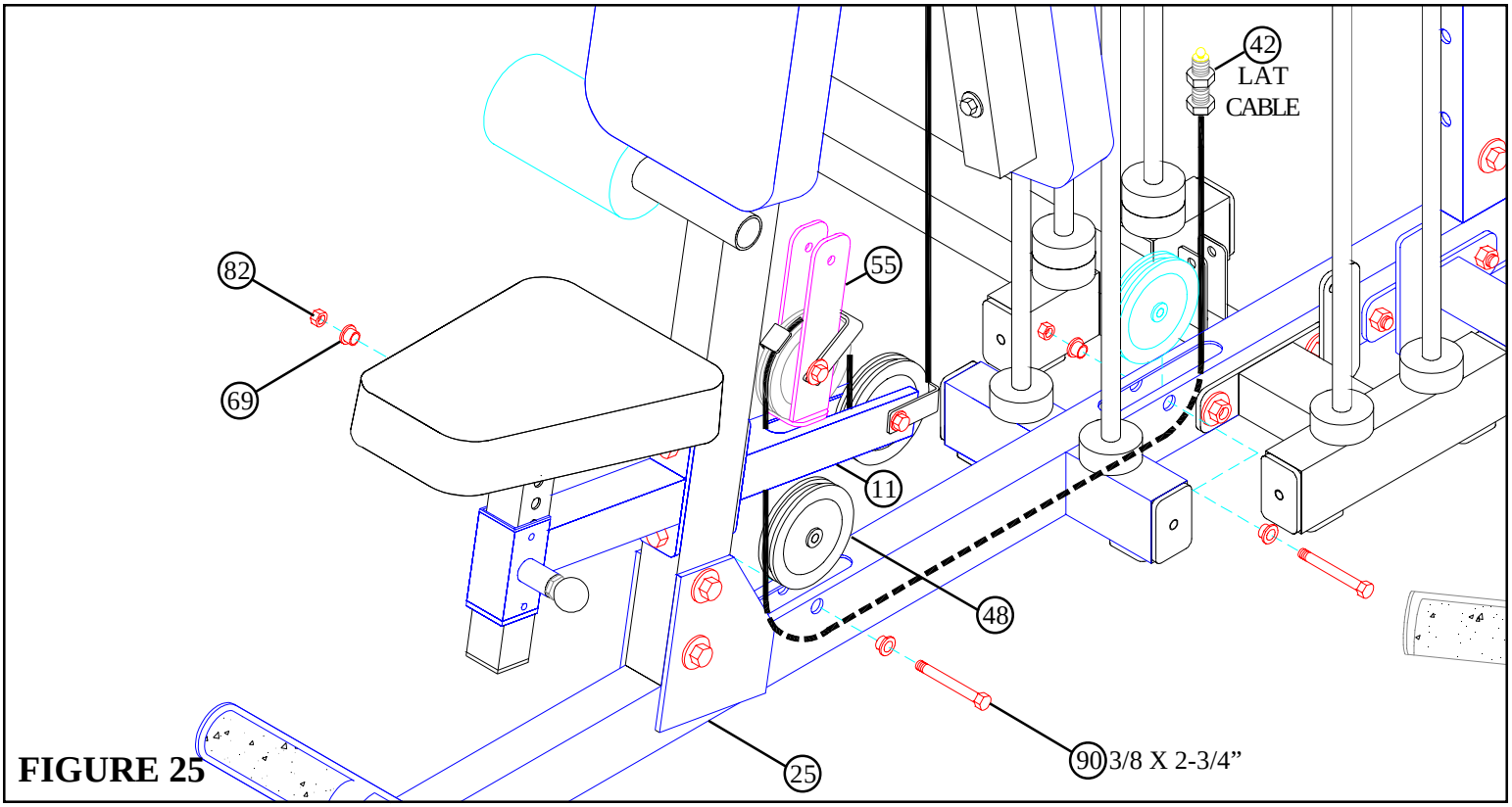


FIGURE 25

STEP 25:

- Route the LAT CABLE (42) around the pulley in FLOATING PULLEY STOP (11) and the FLOATING PULLEY BRACKET (55) as shown in FIGURE 25. **(NOTE: The CABLE CLIPS may need to be loosened.)**
- **SECURELY** assemble two 4-1/2” PULLEYS (48) into the slots of the BASE (25) using two 3/8 X 2-3/4” BOLTS (90), four 3/8” FLANGE SPACERS (69), and two 3/8” LOCK NUTS (82). **(NOTE: Loop the cable around each pulley prior to inserting it in the the slot.)**

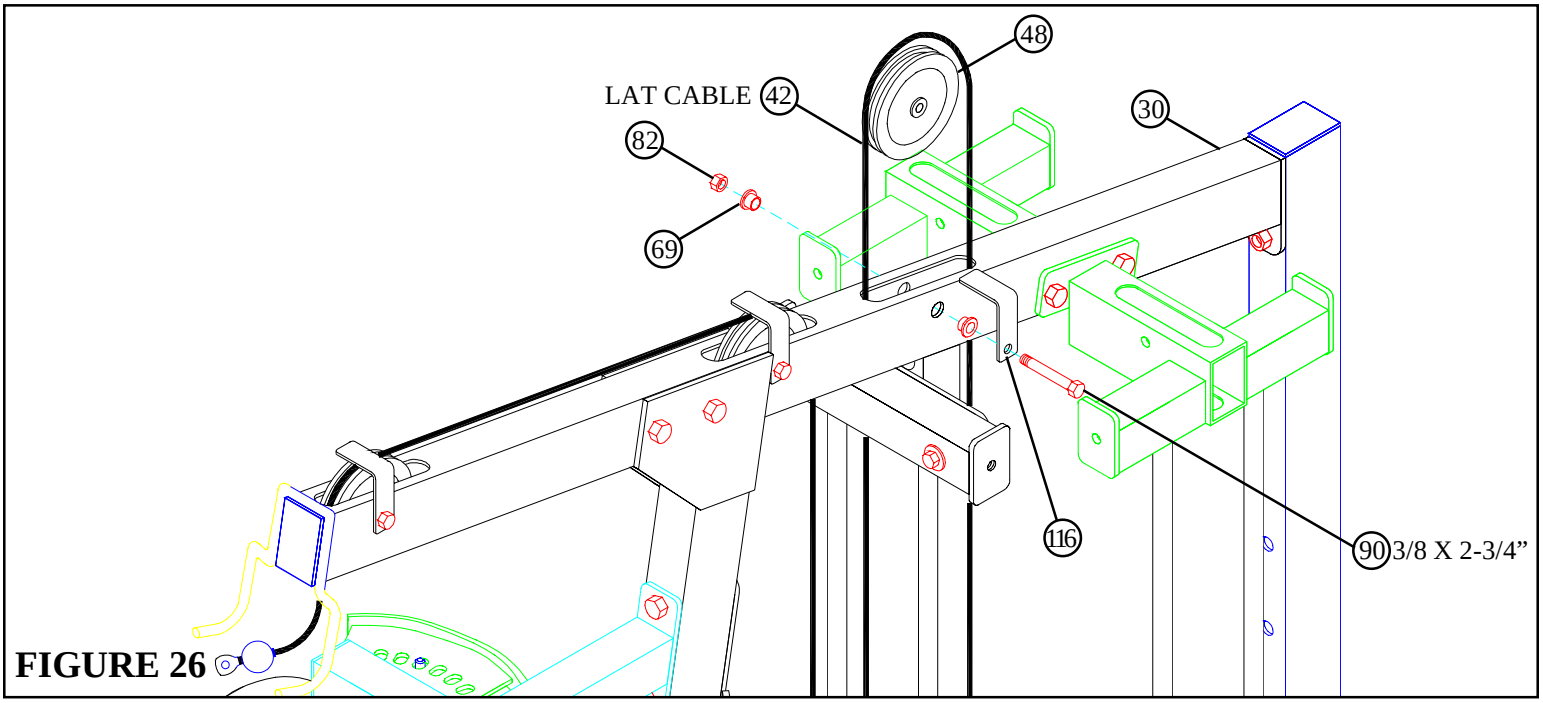


FIGURE 26

STEP 26:

- Route the threaded end of the LAT CABLE (42) through the TOP BOOM (30) and down through the PEC GUIDE ROD SUPPORT (22) as shown in FIGURE 26.
- **SECURELY** assemble one 4-1/2” PULLEY (48) into the rear slot of the TOP BOOM (30) using one 3/8 X 2-3/4” BOLT (90), two 3/8” FLANGE SPACERS (69), one 2-7/8” X 2-1/4” CABLE CLIP (116) and one 3/8” LOCK NUT (82). **(NOTE: Loop the cable around the pulley prior to inserting it in the the slot.)**

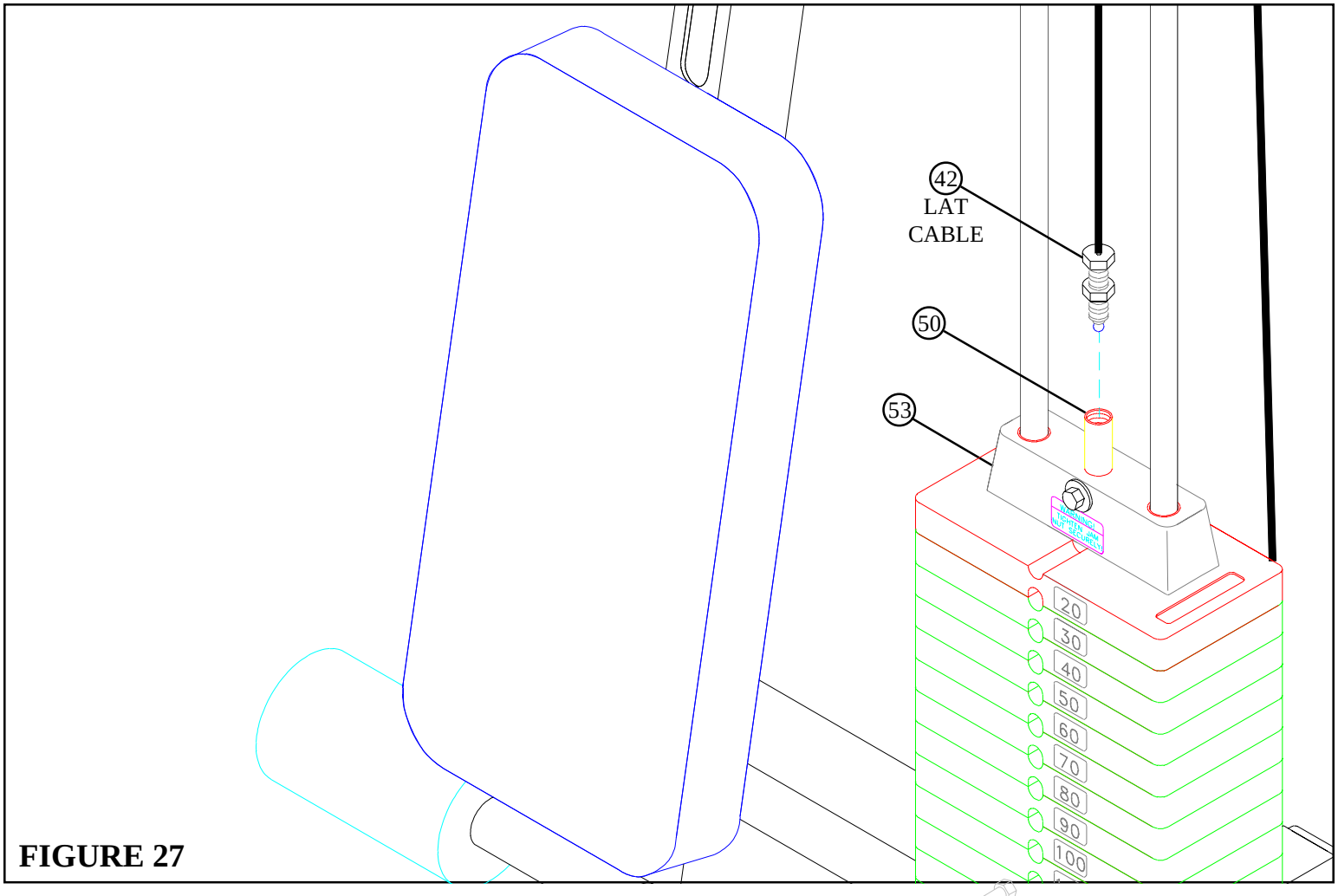


FIGURE 27

STEP 27:

- Screw the threaded end of the LAT CABLE (42) approximately 1” into the end of the SELECTOR SHAFT (50) of the HEAD PLATE (53) as shown in FIGURE 27.

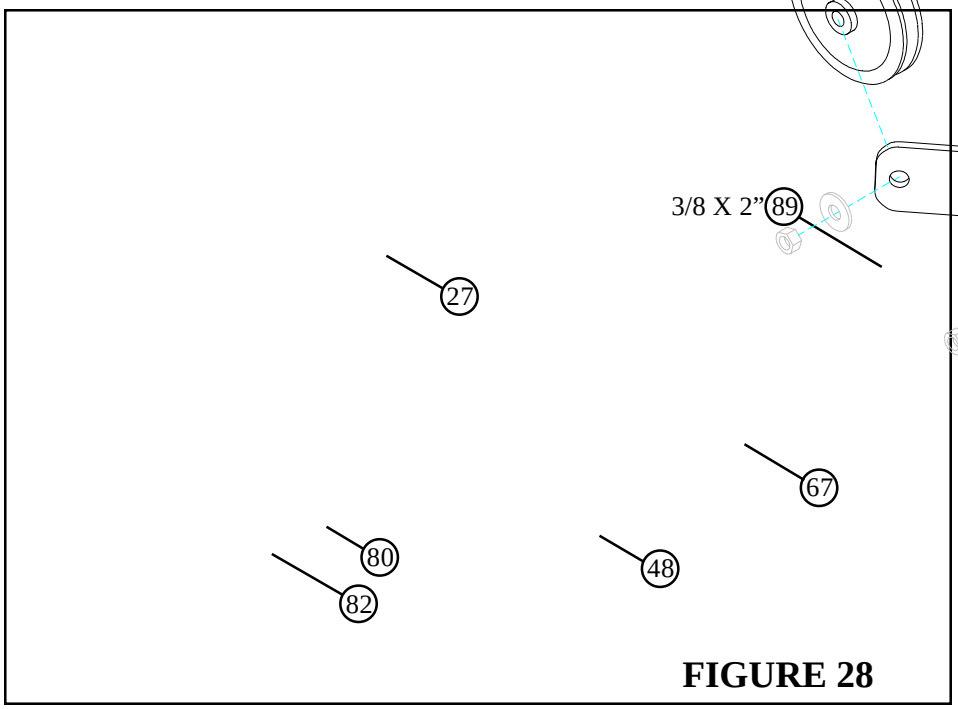


FIGURE 28

STEP 28:

- **LOOSELY** assemble two 4-1/2” PULLEYS (48) to the CENTER PULLEY BRACKET (27) using two 3/8 X 2” BOLTS (89), two 2-7/8” CABLE CLIPS (67), two 3/8” WASHERS (80), and two 3/8” LOCK NUTS (82). See FIGURE 28.

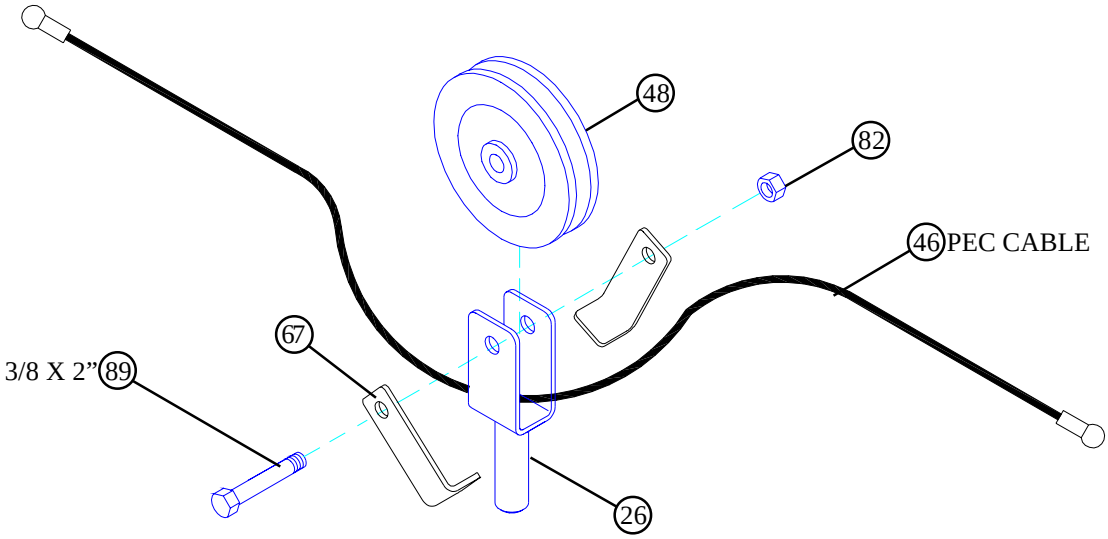


FIGURE 29

STEP 29:

- Assemble one 4-1/2” PULLEY (48) around the PEC DEC CABLE (46) and to the PULLEY BRACKET (26) using one 3/8 X 2” BOLT (89), two 2-7/8 X 1” CABLE CLIPS (67) and one 3/8” LOCKNUT (82) as shown in FIGURE 29.

STEP 30:

- Slide the ends of the PEC DEC CABLE (46) into the bushings on the PEC CAMS (28) as shown on FIGURE 30.
- Lay the PEC DEC CABLE (46) over the pulleys and under the cable retaining clips in the CENTER PULLEY BRACKET (27) as shown in FIGURE 30. **(NOTE: Securely tighten the pulley connections in the CENTER PULLEY BRACKET (27). The cable retaining clips should be at approximately a 45° angle.)**

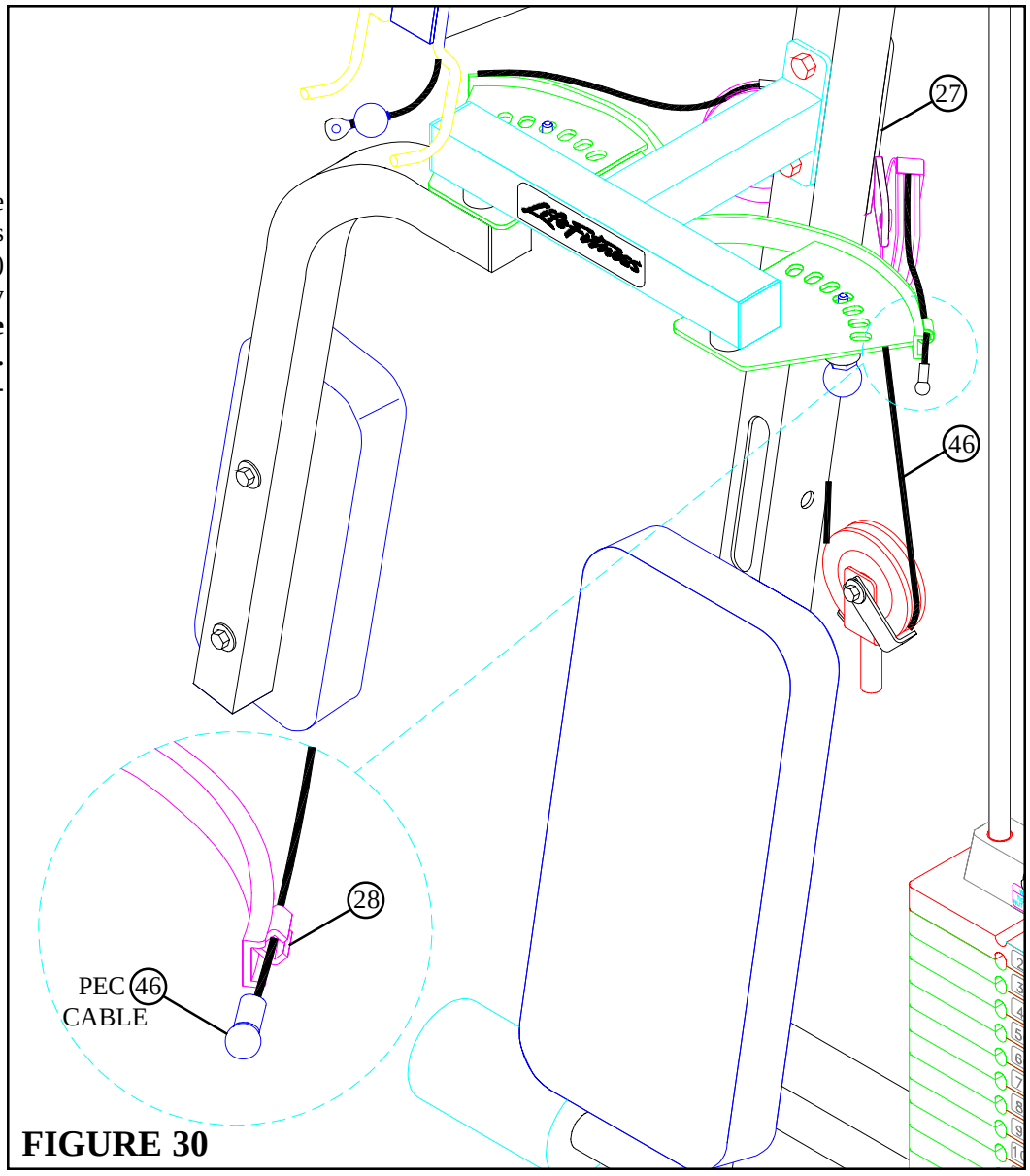


FIGURE 30

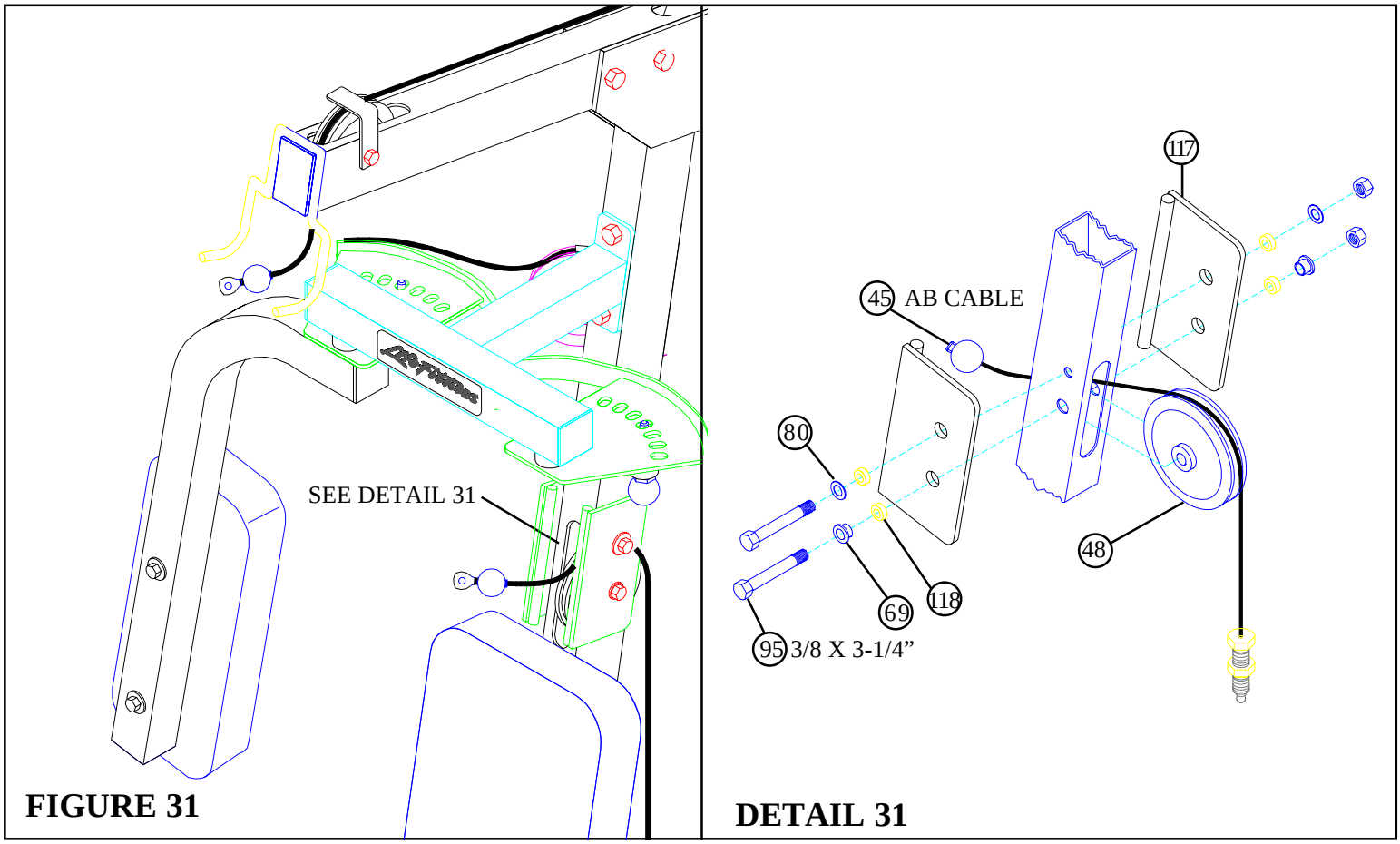


FIGURE 31

DETAIL 31

STEP 31:

- Securely assemble the ball end of the AB CABLE (45) and one 4-1/2” PULLEY (48) to the FRONT UPRIGHT (29) using two AB PULLEY PLATES (117), two 3/8 X 3-1/4” BOLTS (91), four 1/4” SPACERS (118), two 3/8” FLANGE SPACERS (69), two 3/8” WASHERS (80) and four 3/8” LOCKNUTS (82) . **(NOTE: The AB CABLE (45) should be routed underneath the retaining bolt as shown in DETAIL 3.)**

STEP 32:

- Route the AB CABLE (45) around the FLOATING PULLEY BRACKET (55) using one 4-1/2” PULLEY (48), one 3/8 X 2” BOLT (89), two 2-7/8 X 1” CABLE CLIPS (67), two 3/8” LOCK NUTS (82). See FIGURE 32.

- Screw the threaded end of AB CABLE (45) approximately 1” into the end of the PULLEY BRACKET (26) and tighten jam nut securely as shown in FIGURE 32.

IMPORTANT! Make sure the cables are running in the grooves of all pulleys.

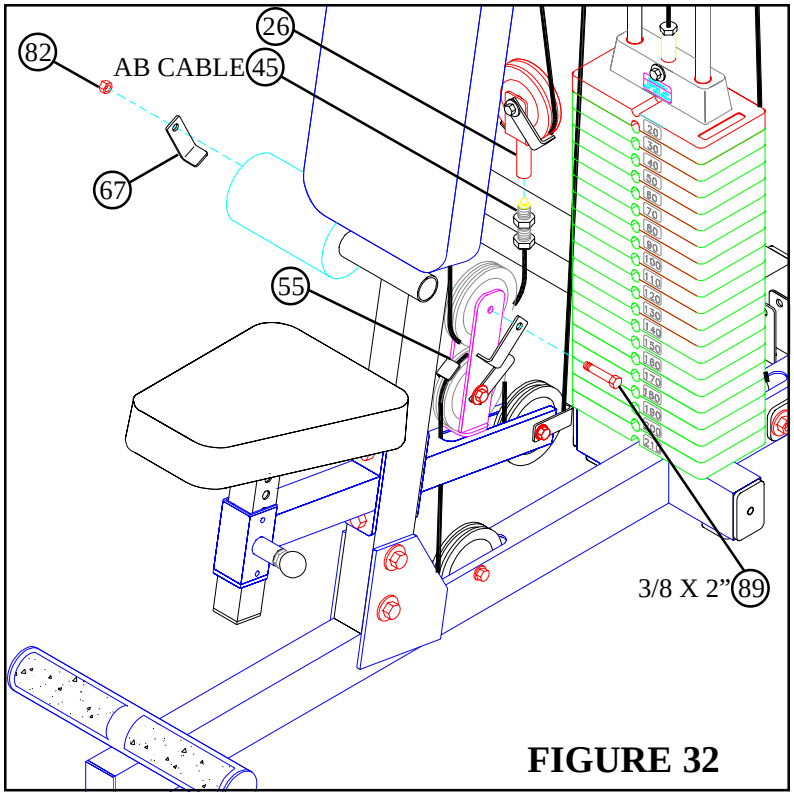
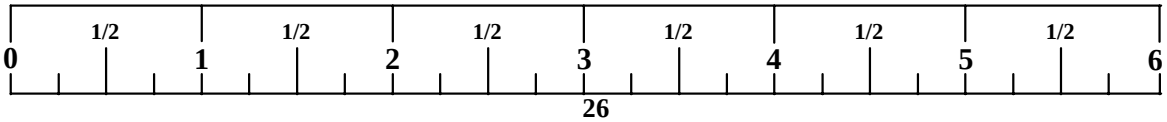


FIGURE 32



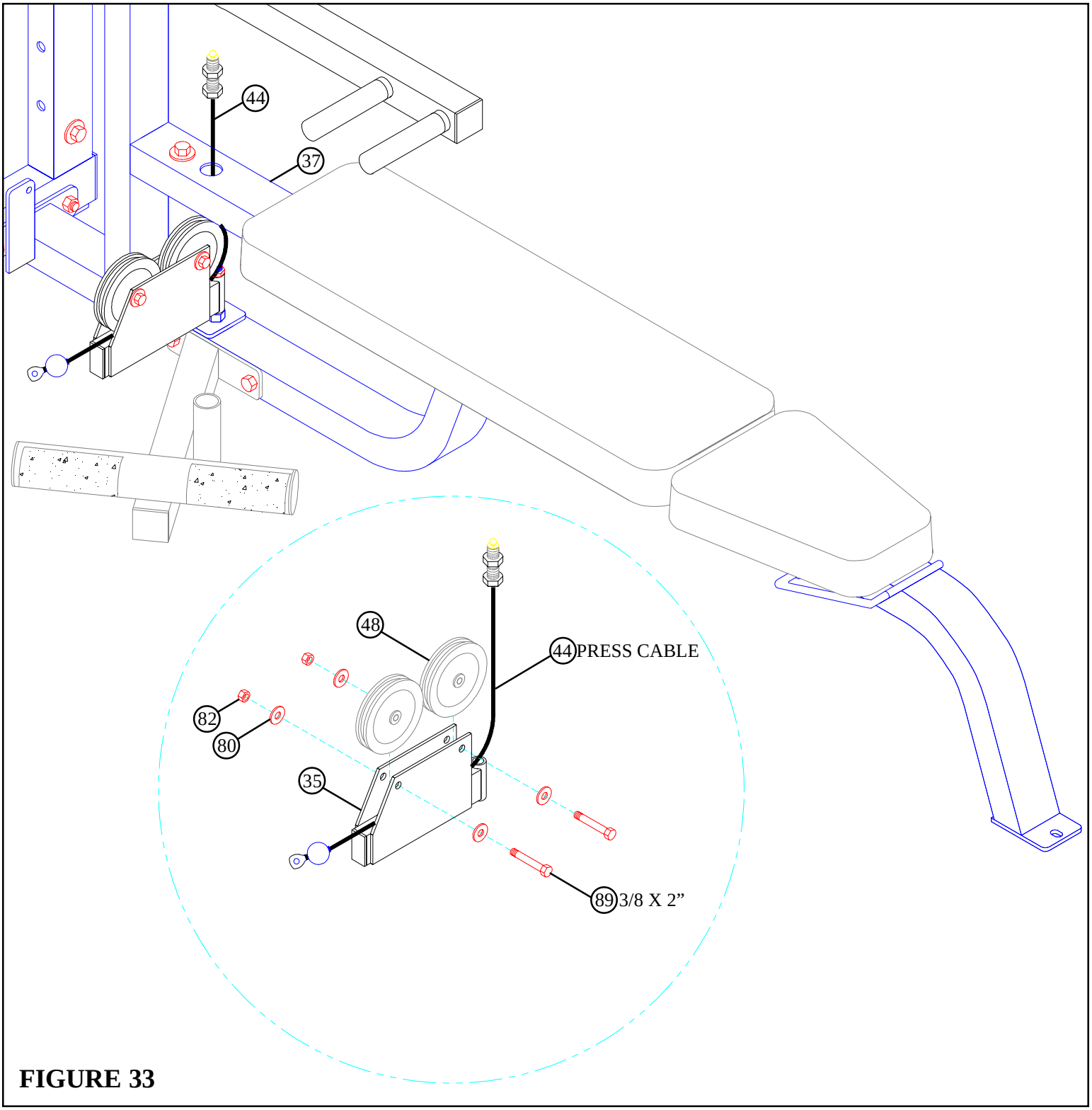


FIGURE 33

STEP 33:

- **SECURE** the ball end of the PRESS CABLE (44) and two 4-1/2” PULLEYS (48) to the SWIVEL PULLEY BRACKET (35) using two 3/8 X 2” BOLTS (89), four 3/8” WASHERS (80), and two 3/8” LOCK NUTS (82) as shown in FIGURE 33. **(NOTE: Loop the cable around the pulleys prior to inserting it into the SWIVEL PULLEY BRACKET.)**

- Route the threaded end of the PRESS CABLE (44) through the large hole in the PRESS FRAME (37) as shown in FIGURE 33.

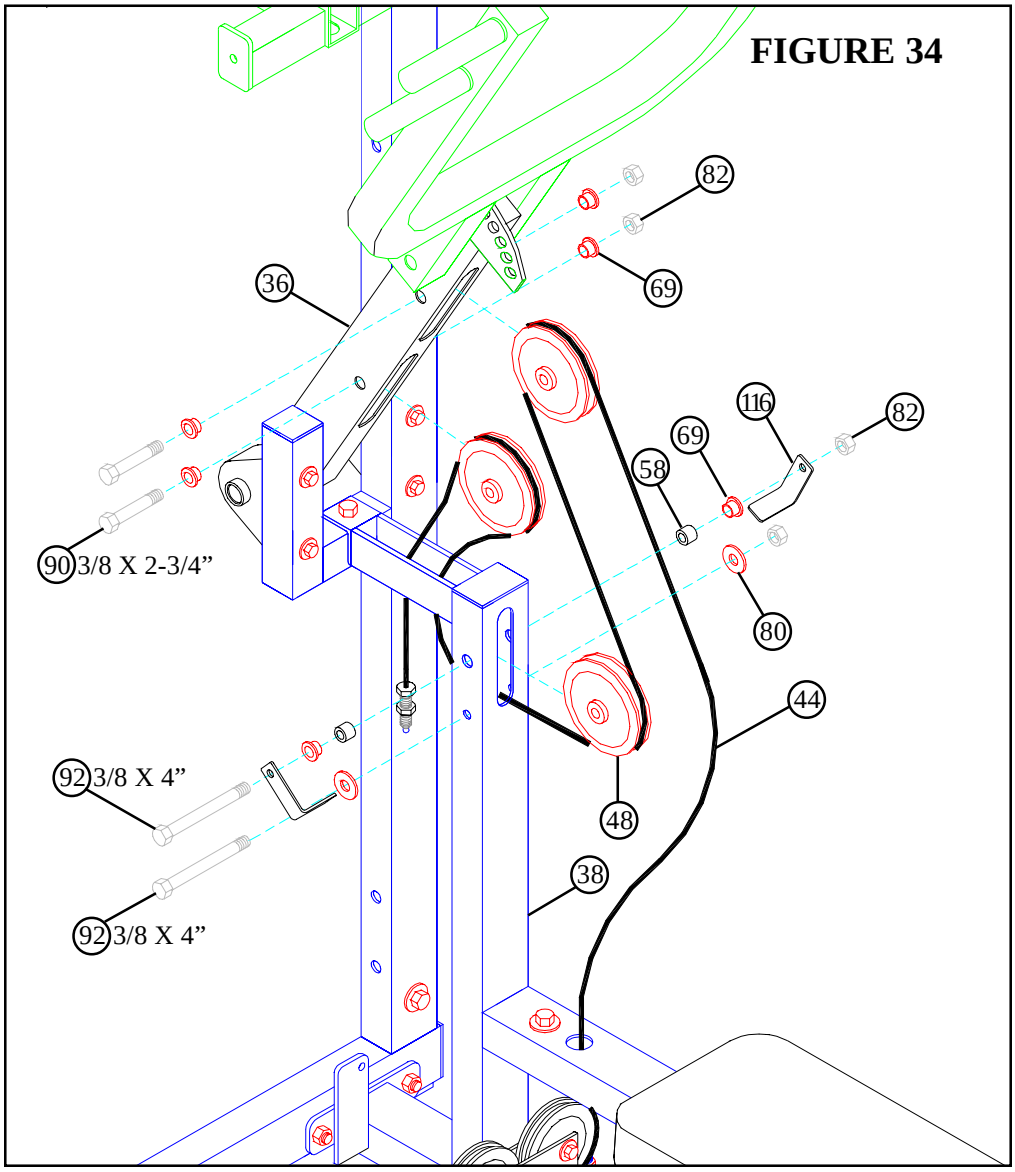


FIGURE 34

STEP 34:

- Route the threaded end of the PRESS CABLE (44) around one 4-1/2” PULLEY (48) and **SECURELY** assemble the pulley to the front slot of the PRESS ARM ADJUST (36) using one 3/8 X 2-3/4” BOLT (90), two 3/8” FLANGE SPACERS (69), and one 3/8” LOCK NUT (82) as shown in FIGURE 34. **(NOTE: Loop the cable over the pulley prior to inserting it into the slot.)**
- Route PRESS CABLE (44) through the slot in the PRESS BASE (38) then **SECURELY** assemble one 4-1/2” PULLEY (48) to the PRESS BASE (38) using two 3/8 X 4” BOLTS (92), two 2-7/8 X 2-1/4” CABLE CLIPS (116), two 3/8” FLANGE SPACERS (69), two 3/8 X 1/2” SPACERS (58), two 3/8” WASHERS (80), and two 3/8” LOCK NUTS (82) as shown in FIGURE 34. **(NOTE:Make sure the cable is routed between the pulley and the CABLE RETAINING BOLT.)**
- Route the PRESS CABLE (44) around one 4-1/2” PULLEY (48) and **SECURELY** assemble the pulley to the rear slot of the PRESS ARM ADJUST (36) using one 3/8 X 2-3/4” BOLT (90), two 3/8” FLANGE SPACERS (69), and one 3/8” LOCK NUT (82) as shown in FIGURE 34. **(NOTE: Loop the cable over the pulley prior to inserting it into the slot.)**

STEP 35:

- **SECURE** the PRESS CABLE (44) and two 4-1/2” PULLEYS (48) to the vertical flats on the PRESS BASE (38) and on the PRESS WEIGHT STACK BASE (24) using two 3/8 X 2” BOLTS (89), two 2-7/8” CABLE CLIPS (67) two 3/8” WASHERS (80), and two 3/8” LOCK NUTS (82) as shown in FIGURE 35. **(NOTE: The PRESS CABLE (44) should be routed underneath the short leg of the CABLE CLIP. Also, the CABLE CLIPS should be positioned straight down to function properly.)**

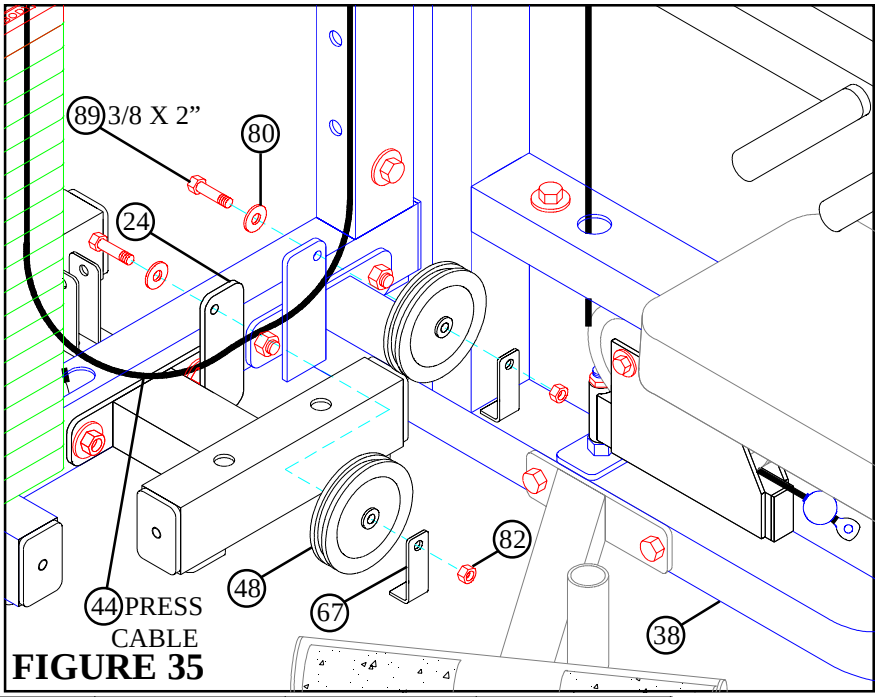


FIGURE 35

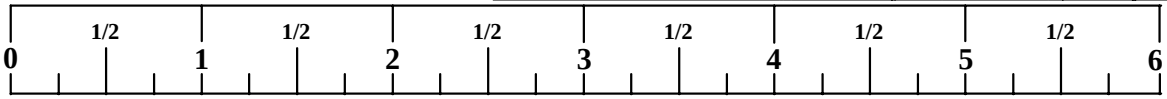
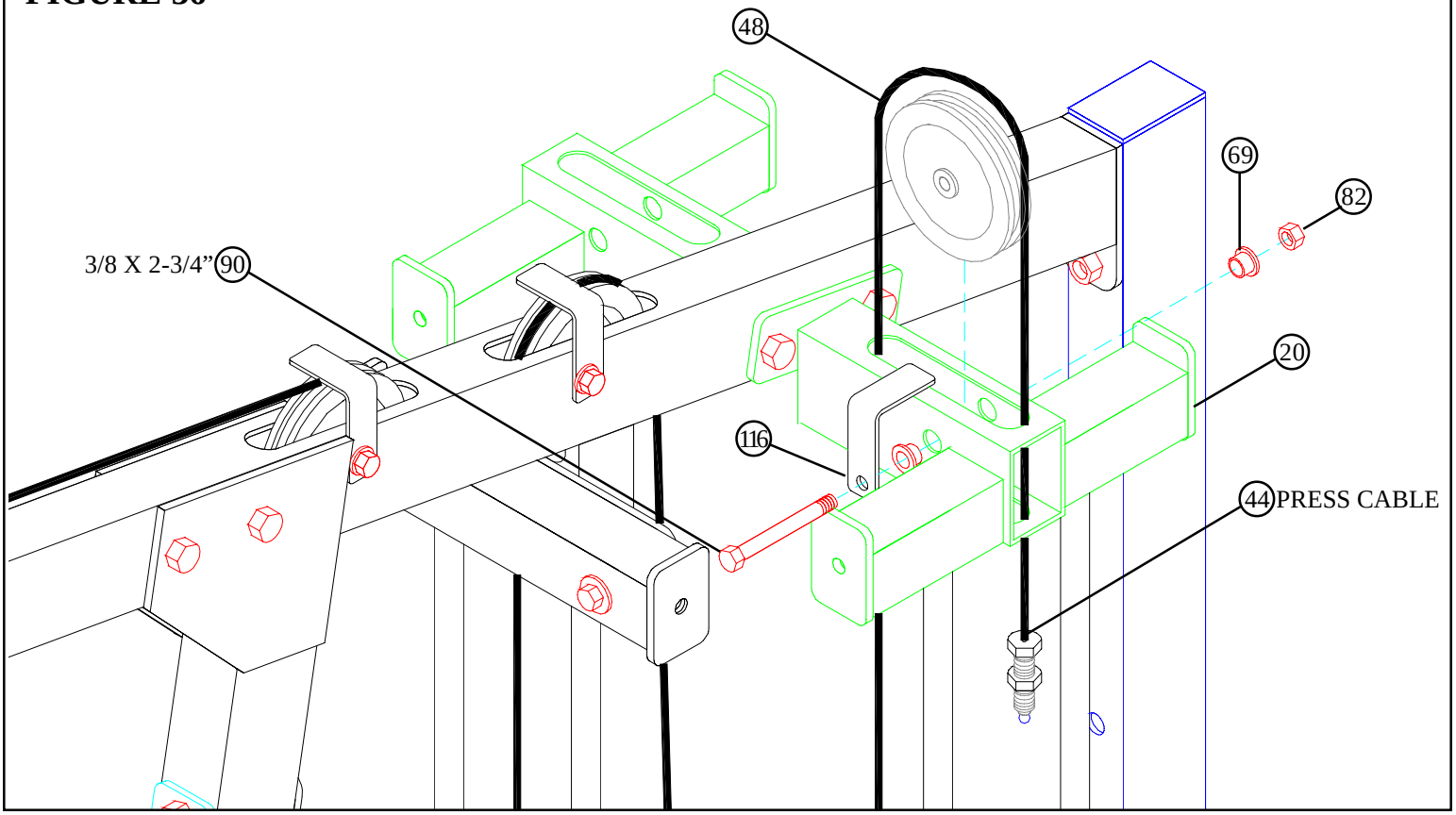
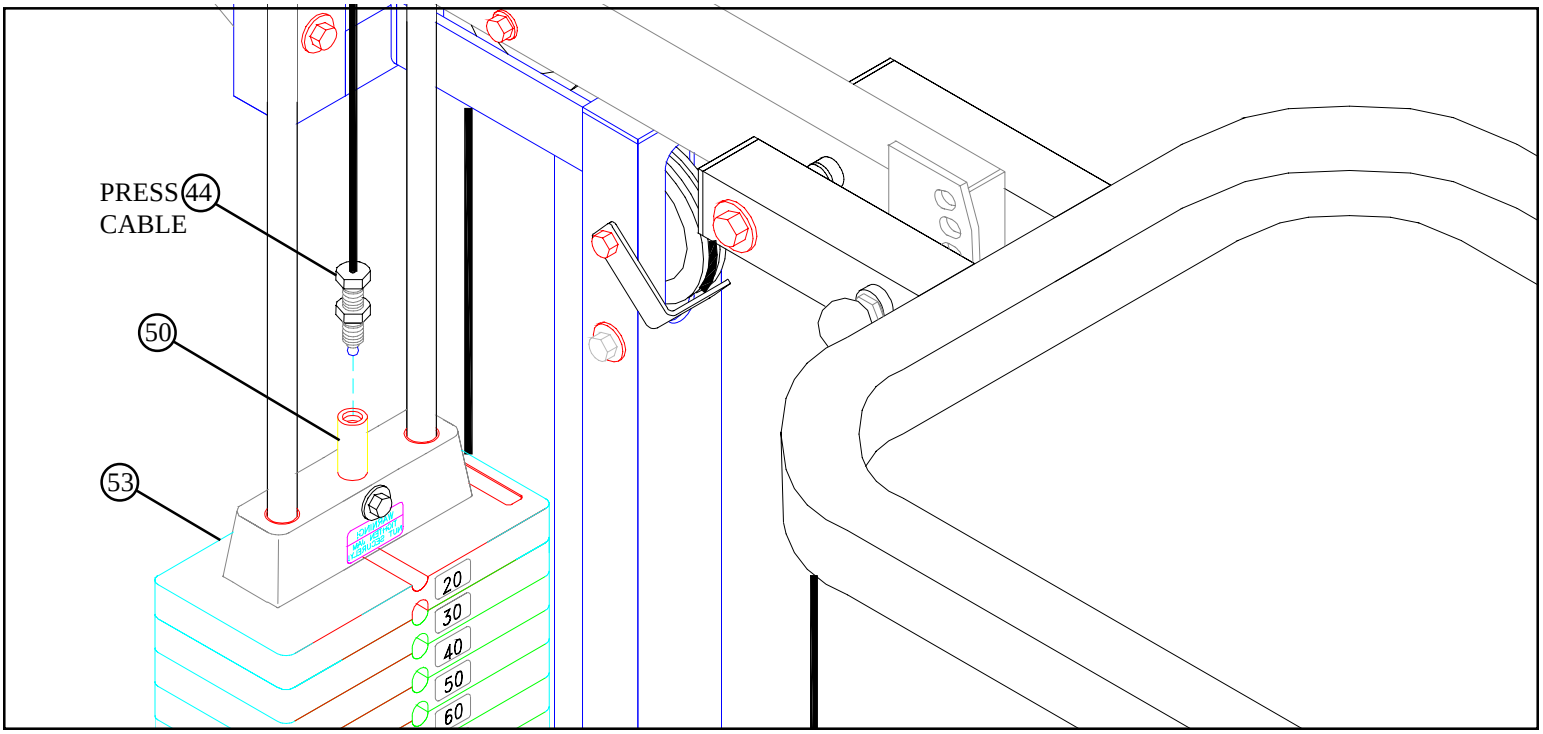


FIGURE 36



STEP 36:

- **SECURE** the PRESS CABLE (44) and one 4-1/2" PULLEY (48) to the PRESS GUIDE ROD SUPPORT (20) using one 3/8 X 2-3/4" BOLT (90), two 3/8" FLANGE SPACERS (69), one 2-7/8 X 2-1/4" CABLE CLIP (116) and one 3/8" LOCK NUT (82) as shown in FIGURE 36. **(NOTE: Loop the cable around the pulleys prior to inserting it into the PRESS GUIDE ROD SUPPORT.)**



STEP 37:

- Screw the threaded end of the PRESS CABLE (44) approximately 1" into the end of the SELECTOR SHAFT (50) of the HEAD PLATE (53) as shown in FIGURE 37.

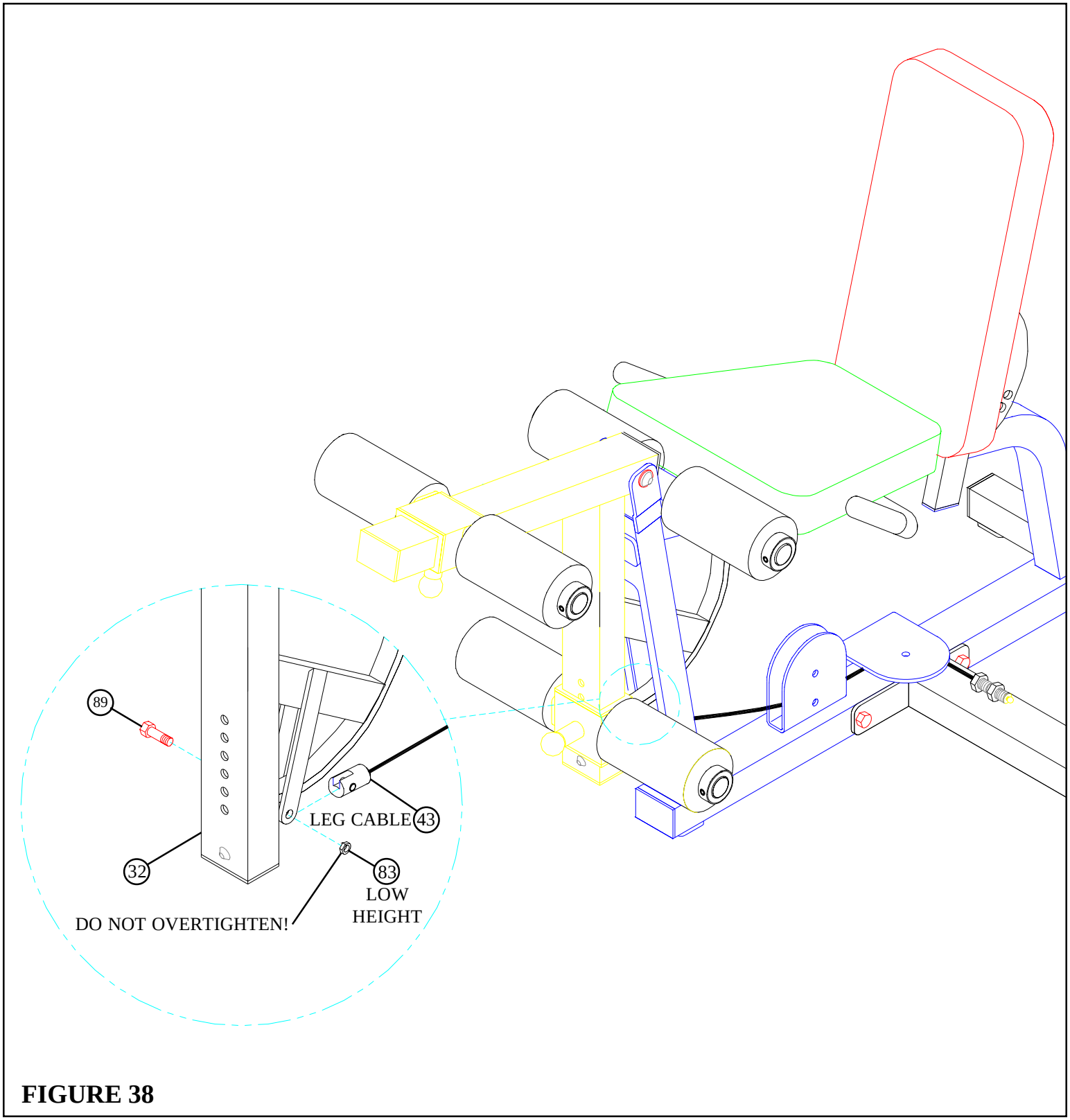


FIGURE 38

STEP 38:

- **SECURE** the swivel on the LEG CABLE (43) to the tab on the LEG EXT/CURL (32) using one 3/8 X 2" BOLT (89) and one 3/8" LOW HEIGHT LOCK NUT (83) as shown in FIGURE 38. **(NOTE: Do not overtighten! Swivel clevis should rotate freely.)**

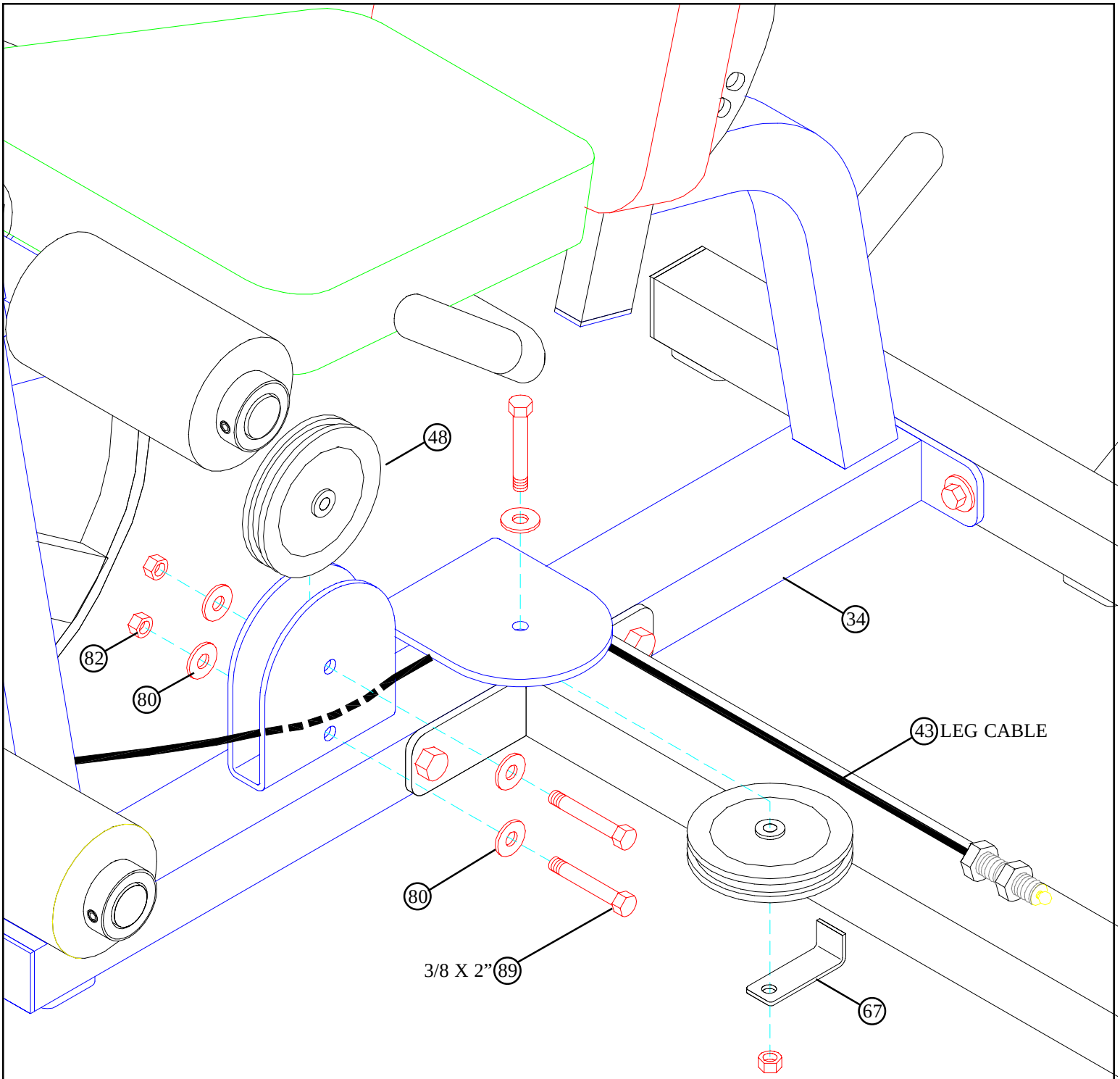


FIGURE 39

STEP 39:

- Route the LEG CABLE (43) through the vertical and horizontal brackets on the LEG FRAME (34) as shown in FIGURE 39.
- **SECURELY** assemble one 4-1/2” PULLEY (48) to the vertical bracket on the LEG FRAME (34) using one 3/8 X 2” BOLT (89), two 3/8” WASHERS (80), and one 3/8” LOCK NUT (82) as shown in FIGURE 39.
- **SECURELY** assemble one 3/8 X 2” BOLT (89), two 3/8” WASHERS (80), and one 3/8” LOCK NUT (82) to the vertical bracket as shown in FIGURE 39. **(Make sure CABLE is running over 3/8 X 2” RETAINING BOLT.)**
- **SECURELY** assemble one 4-1/2” PULLEY (48) to the horizontal bracket on the LEG FRAME (34) using one 3/8 X 2” BOLT (89), one 3/8” WASHER (80), one 2-7/8” CABLE CLIP (67), and one 3/8” LOCK NUT (82) as shown in FIGURE 39. **(NOTE: Before tightening, make sure CABLE CLIP (67) is positioned as shown in FIGURE 39.)**

IMPORTANT! Make sure the cables are running in the grooves of all pulleys.

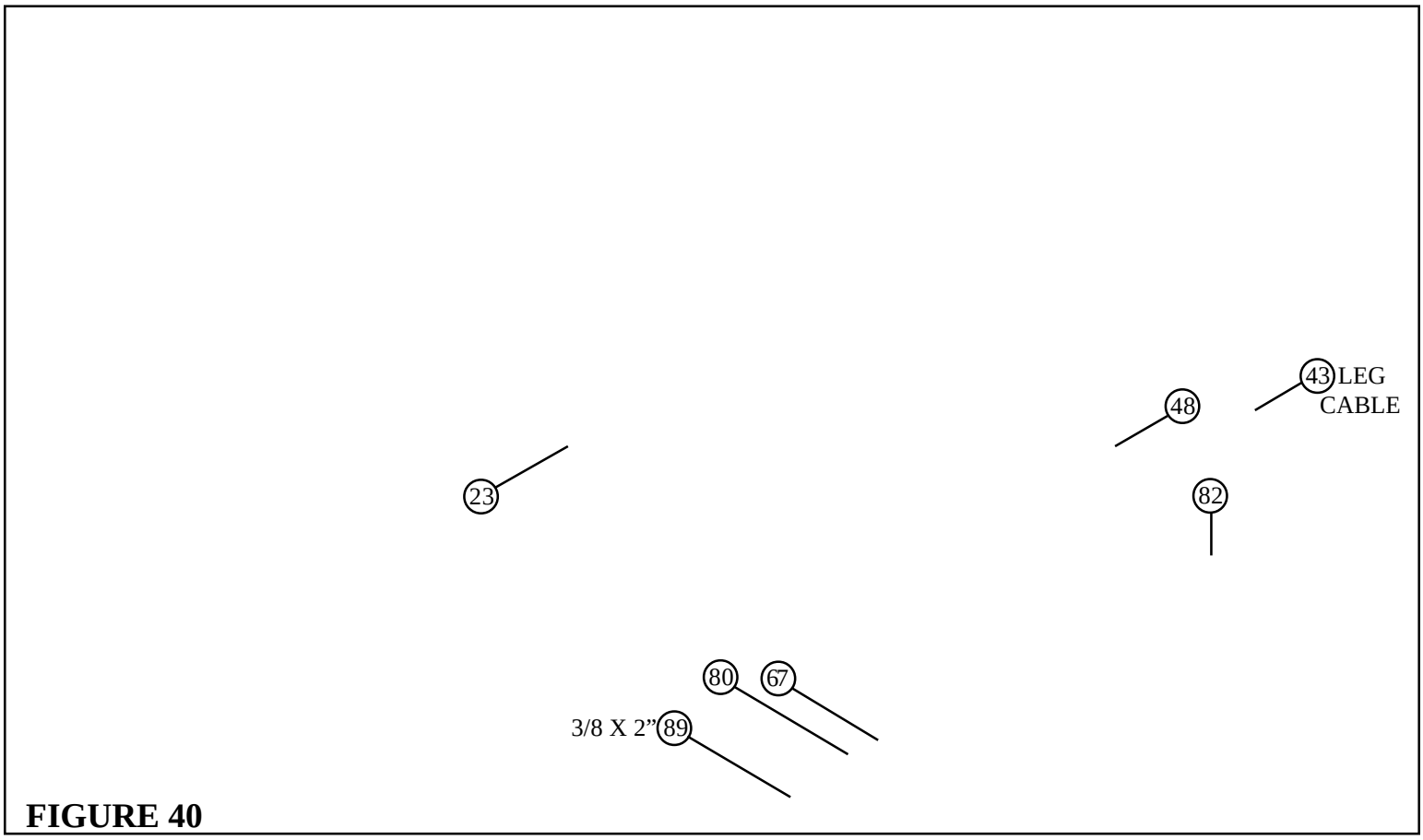


FIGURE 40

STEP 40:

- Route the threaded end of the LEG CABLE (43) **under** the leg weight stack and throught the vetical bracket on the LEG WEIGHT STACK BASE (23) as shown in FIGURE 40.
- Assemble one 4-1/2” PULLEY to the vertical bracket on the WEIGHT STACK BASE (23) using one 3/8 X 2” BOLT (89),one 2-7/8 X 1” CABLE CLIP (67), two 3/8” WASHERS (80), and one 3/8” LOCK NUT (82) . **(NOTE: Loop the cable under the pulley prior to inserting it into the slot.)**

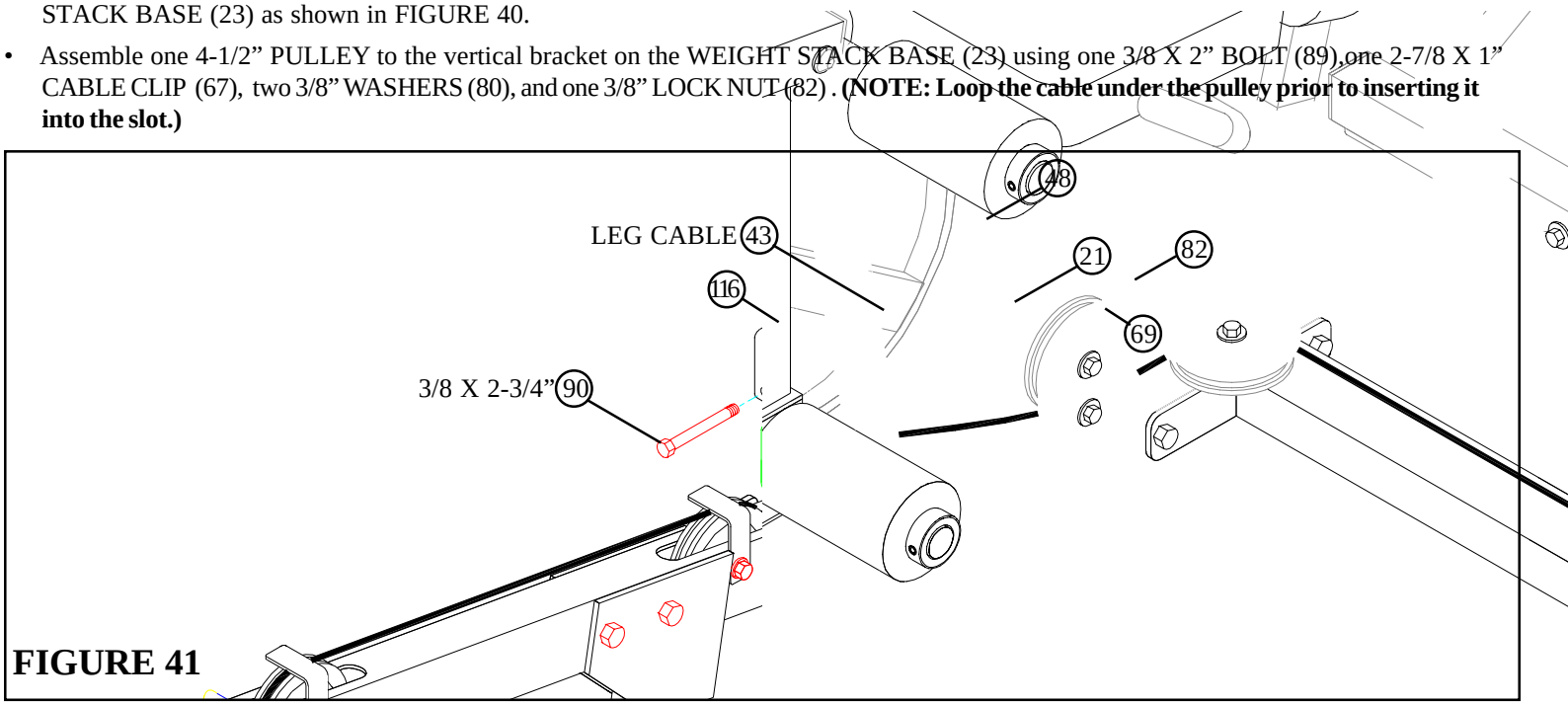
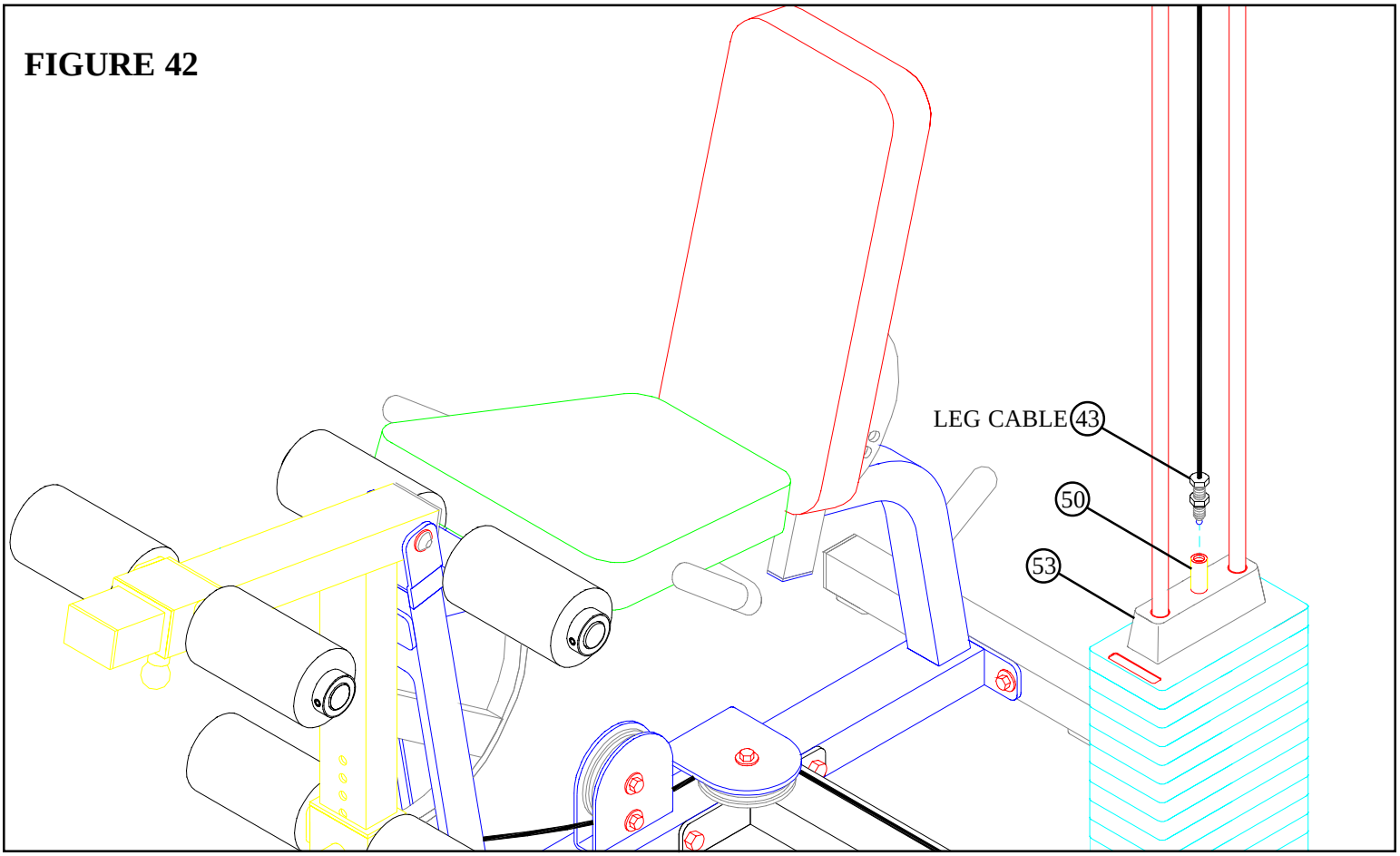


FIGURE 41

STEP 41:

- **SECURE** the LEG CABLE (43) and one 4-1/2” PULLEY (48) to the LEG GUIDE ROD SUPPORT (21) using one 3/8 X 2-3/4” BOLT (90), two 3/8” FLANGE SPACERS (69), one 2-7/8 X 2-1/4” CABLE CLIP (116)and one 3/8” LOCK NUT (82) as shown in FIGURE 41. **(NOTE: Loop the cable around the pulleys prior to inserting it into the LEG GUIDE ROD SUPPORT.)**

FIGURE 42



STEP 42:

- Screw the threaded end of the LEG CABLE (43) approximately 1” into the end of the SELECTOR SHAFT (50) of the HEAD PLATE (53) as shown in FIGURE 42.

STEP 43:

- Perform the following to all three WEGHT STACKS:
- Insert one WEIGHT STACK PIN (75) into each weight stack on the 8500 GYM as shown in FIGURE 43.
- If upon completion of assembly, the HEAD PLATE (53) does not sit on top of the first WEIGHT PLATE (106), push the HEAD PLATE (53) down, insert the WEIGHT STACK PIN (75) and perform several repetitions at the press station. This will relax the cable system and prevent the HEAD PLATE (53) from lifting up.
- If after completing previous step, the HEAD PLATE (53) still does not sit on top of the first WEIGHT PLATE (106) or if there is excess slack in the cable system, adjust the threaded end of the CABLE accordingly and retighten the jam nuts.
- If there is excess slack in the AB or PEC DEC cable system, adjust the threaded end of the AB CABLE (45) accordingly and retighten the jam nut.

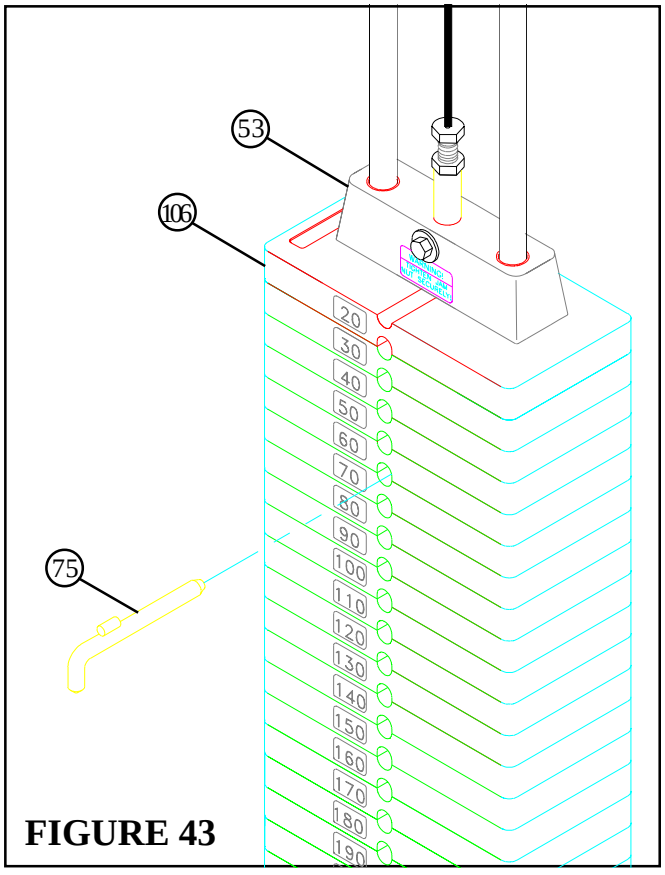
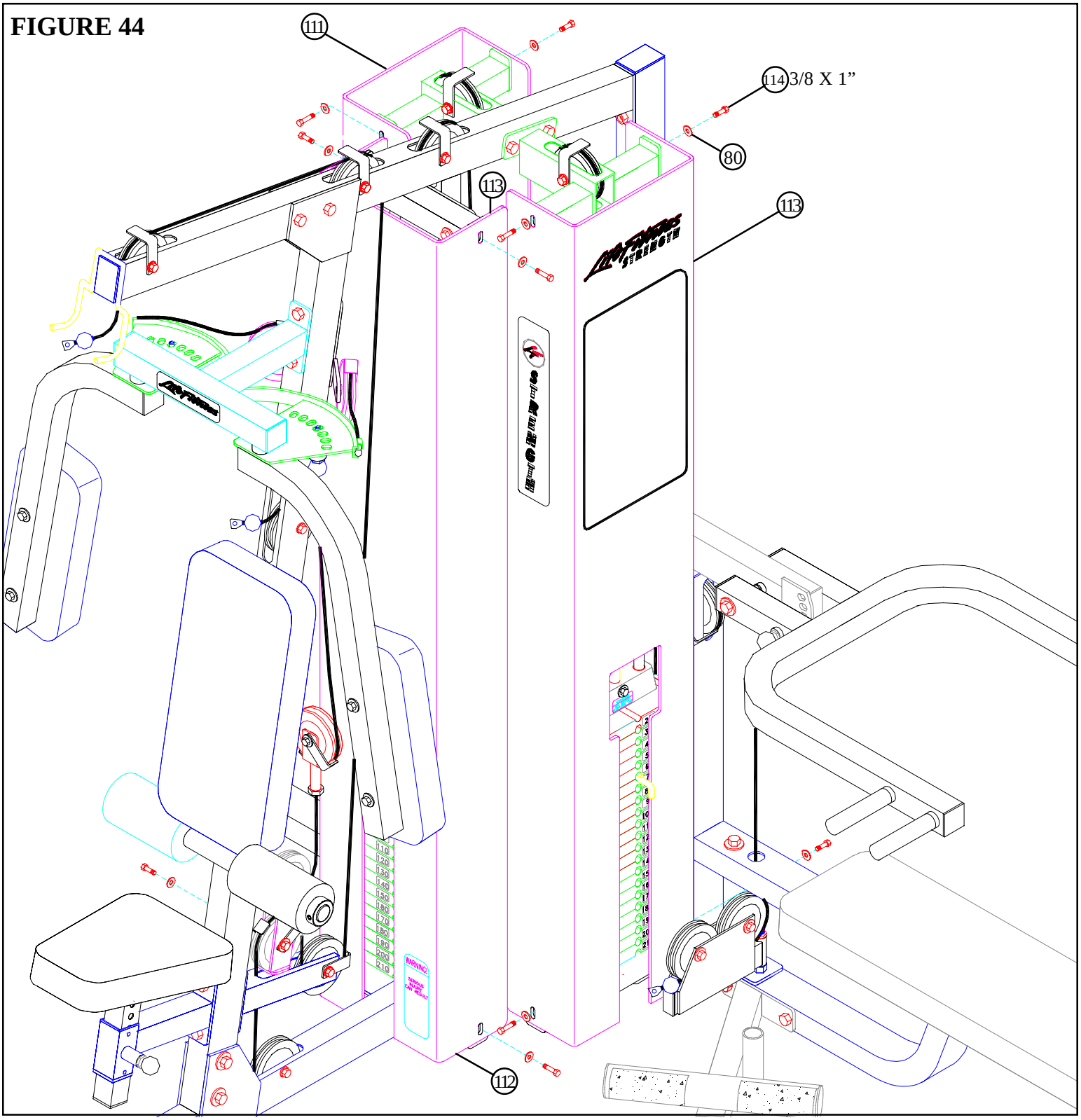


FIGURE 43

FIGURE 44

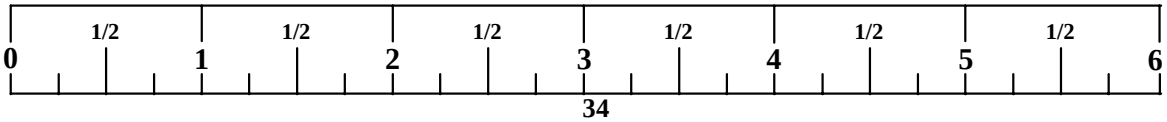


STEP 44:

- **SECURELY** assemble the PRESS SHROUD (113-has press exercise placard) to the PRESS GUIDE ROD SUPPORT (20) and the PRESS WEIGHT STACK BASE (24) using four 3/8” X 1” BOLTS (114) and four 3/8” WASHERS (80). See FIGURE 44.

- **SECURELY** assemble the PEC SHROUD (112-has warning label in right corner) to the PEC GUIDE ROD SUPPORT (22) and the BASE (25) using using four 3/8” X 1” BOLTS (114) and four 3/8” WASHERS (80). See FIGURE 44.

- **SECURELY** assemble the LEG SHROUD (111-has leg exercise placard) to the LEG GUIDE ROD SUPPORT (21) and the LEG WEIGHT STACK BASE (23) using four 3/8” X 1” BOLTS (114) and four 3/8” WASHERS (80). See FIGURE 44.



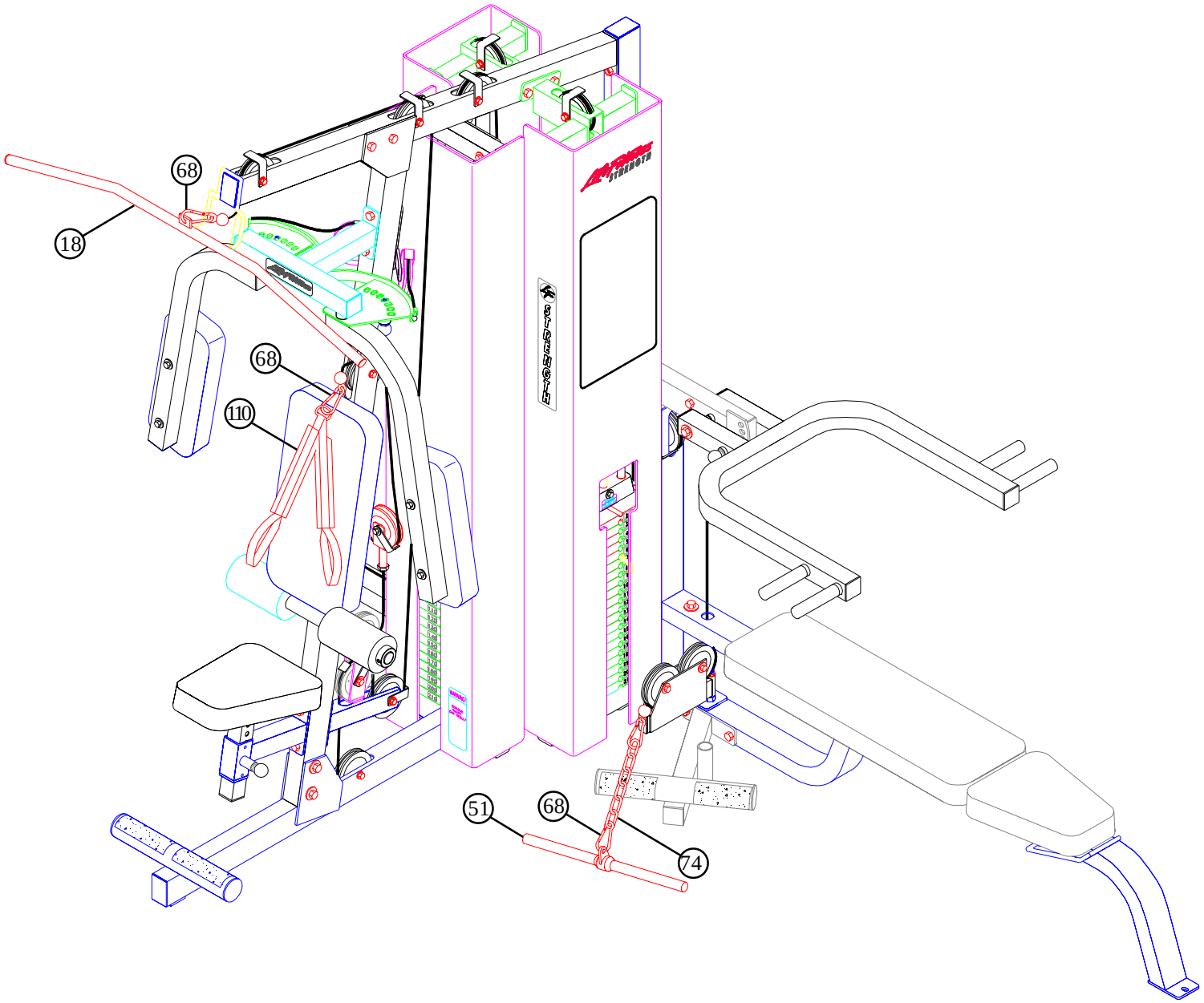


FIGURE 45

STEP 45:

- Attach the LAT BAR (18) to the ball end of lat cable using one 5/16” SNAP LINK (68).
- Attach the AB CRUNCH STRAP (110) to the ball end of cable using one 5/16” SNAP LINK (68).
- Attach the LOW ROW BAR (51) to the ball end of press cable using two 5/16” SNAP LINKS (68) and one 12 LINK CHAIN (74).

Thank you for purchasing the LifeFitness 8500 3-STACK MULTI-GYM. If unsure of proper use of equipment, call your local LifeFitness distributor or call the LifeFitness customer service department at (800) 328-9714.